YACHTING

Volume LVII JUNE + 1935 Number VI

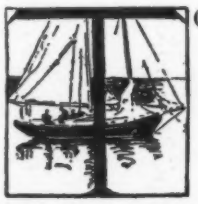
Ellsworth Ford

The Anchorage at Cowes, Isle of Wight, as seen from the Royal London Yacht Club. The royal yacht "Victoria and Albert" and His Majesty's cutter "Britannia" may be seen in the roadstead

Racing in the Large Classes in England

Something About the Conditions With Which a Stranger Racing There Has to Contend

By C. SHERMAN HOYT



NO ONE accustomed to large yacht racing in American waters, the experience of racing for the first time in the Solent, or in the English Channel to the westward, will present a series of surprises.

Aside from the factor of geographical conditions, the entire sport is on a different plane. I doubt whether it occurs to American racing owners or race committees that the public is the least bit concerned — aside from the fact that spectators are frequently a nuisance and must be kept off the course. We like to have them show interest, but we would not lift a finger to lay starting and finishing lines and courses where the general public (I don't mean the yacht owning public) might at times catch a glimpse of the races. The public be damned! Give us the fairest courses possible, which we can reach with the minimum of trouble and from which we can scuttle back to our moorings afterwards as quickly — that is the general attitude in this country. A yacht race here is conducted purely in the interest of the competitors, though sometimes the convenience of the race committee is a factor. Except in those cases when we are operating under the direction of austere bodies, such as an America's Cup Committee, or a selection committee for important events, no one else is given consideration. Races are postponed and called off by the committee in an effort to get the most favorable weather conditions. No one will deny, I think, that every effort is made to give the competitors the fairest possible chance to prove their relative speed, eliminating the advantage of local knowledge, luck, etc., to the greatest possible extent.

In England the situation is entirely different. Competitors participate in the first, second, third, or whatever numbered race it may be, in a regatta conducted by some yacht club, scheduled and advertised months in advance. Formal written entries, accompanied by a substantial cash

Beken & Son, Cowes

entry fee, are required and must be made in due order, as advertised. In fact, I have known instances of entries being refused on purely technical grounds, such as verbal notification not having been confirmed in writing within the specified time, entries being made too late or not accompanied by the correct entry fee, or for not giving all the data required.

In the majority of cases, in England, yacht racing is for cash prizes. Sometimes an added cup, presented by the town, club, or some individual, is extra inducement. It is really a form of sweepstakes racing in which the entry fees are supposed to take care of approximately one-half of the value of the prizes offered, the rest being furnished by the yacht clubs through popular subscription, donation by the flag officers, or by contribution by the town of the officiating club. The value of the prizes far exceeds the cost of those normally offered for corresponding classes in the United States; this is made possible by reason of the entry fees which must be paid in all cases in England. A winner of a first prize gets quite a substantial sum, especially if the number of entries in his class has been large; a second prize shows a good profit, and a third a bit more than returns the entry fee. At the end of the season a successful yacht may show a handsome profit of winnings over entry fees, but never enough, of course, actually to make money, as a racing stable might do. I suppose a successful Class J yacht might, if raced in all scheduled races, gather in some £1,200 to £1,500, a tidy sum, but yet nowhere nearly enough to pay her season's bills.

This system produces several definite results which may be briefly summarized as follows:

1. Starting and finishing lines and courses, as far as possible, must be within easy sight of the shore, since the public, generally speaking, pays one-half of the expense and the regatta is recognized as a public spectacle which attracts hundreds, and in many cases thousands, of transient visitors.

2. Races must be started as scheduled *pro bono publico*. There can be no postponement for calm, fog, squalls, rain or any other cause, for the program must be carried through, and future commitments prohibit delays. This results, often, in scenes of great confusion when class after class is started in a dead calm against a foul tide and yachts of all sizes anchor or "kedge" at the line in a wild mêlée. Once or twice in recent years the big fellows have practically refused to start in some of the early races when the wind was of near gale force, with risk of serious injury to sails or spars that might ruin their rigs for the rest of the season.

3. Owing to the money consideration, and to the custom of sailing several times around a short course, those doing badly, unless conditions are such that there is fair possibility of a fluke, generally retire, or "chuck it" and go home as soon as their chance of winning any cash prize grows slim.

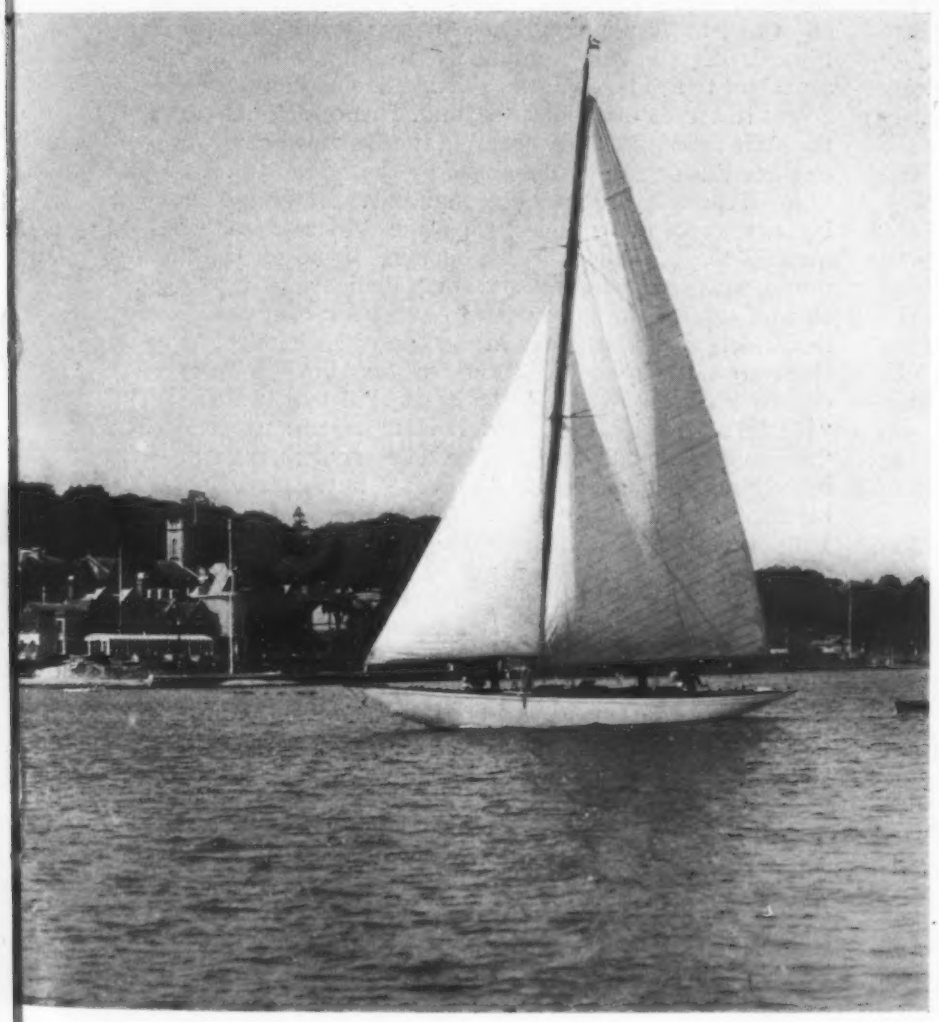
4. The printing of elaborate race programs, giving in great detail entries, recall numbers, owners' distinguishing flags, prizes, starts, courses, any special instructions, etc., is required. The entry fee entitles the owner to one program while extras, copies for club members, or for the general public, are obtainable only at a price.

Left. Cowes itself is a quaint and picturesque town. Looking down one of the wider streets towards the Parade and Anchorage. Most of the other streets at Cowes are too narrow for vehicles to pass

Right. Watching the racing at Cowes. The Solent is usually filled with craft of all kinds during colorful Cowes Week

Below. The Royal Yacht Squadron Castle, Cowes. The two tall poles, or flagstaffs, on shore mark the range for the starting line

Ellsworth Ford Photos



Turning to the physical side and to the courses sailed, I am always amazed and at the same time filled with admiration for the results obtained. How any nation can be so keen about yachting and racing that, in spite of atrocious conditions (in comparison to what we are used to), it has been able to bring all branches of the sport to such a high degree of perfection as the English have done, passes my comprehension. Practically speaking, large boat racing is confined to the English Channel, aside from a few local spots on the Thames or its estuary. Now, the Channel tides rush east and west with great impetuosity and with maddening uncertainty, especially around headlands or where such formations as the Isle of Wight dispute their right of way into and out of important bodies of water extending in vast areas well inland, such as at Southampton, Portsmouth, Plymouth and elsewhere.

The Wight is a charming island, its terrain varying from rolling hills and downs to flat farming country and pleasing woodlands. Its coast is made up of high precipitous chalk cliffs with deep water close to, or miles of flats and sands, bare at low water, yet with fifteen feet or more covering them at high tide. The island is roughly a diamond in shape. At the west of the long axis is the Needles, at the east the Nab, the short axis being north and south, from Cowes to St. Catherines. The tides boil around the island, sometimes flowing in and out of the eastern and western entrances at the same time, and always busy. Between the Wight and the mainland is the Solent, a large and respectable enough looking body of water, and the nearest available bit to London which affords real yachting activity.

Alas, appearances are deceiving, for shoals abound even in the "dog's leg" western entrance at the Needles, and also in the eastern by the Spithead forts and the Nab. The main body of the Solent is dotted with beautiful obstructing shoals such as the various Brambles, Thornhill Bar, and the multiple Ryde sands with queer compass names, such as Northeast Middle. To help Nature out, man has also decreed various prohibited areas which one is not allowed to cross lest he be popped by a mine or a frolicking torpedo from some roaming submarine. Buoys, pronounced "boys," are everywhere; they are cages, cans, nuns, solid or lattice, red, black, white, striped or checkered — to an American point of view utterly without system. Yet they are plainly marked in good block letters, and if you can get near enough to read them, and also find them on the chart, you know where you are.

One has, of course, to learn a new language, and it takes a bit of experience to grasp the fact that "North Drake's Island Buoy" means the buoy north of Drake's Island and that North Drake's Island does not exist. Aside from shoals, tides, "boys" and such hazards, Portsmouth is one of the three chief naval dockyards and bases, and the Navy carries on regardless; and Southampton is one of the world's largest commercial ports. *Majestics, Berengarias, Europas, Empresses of Britain,* and *Leviathans* have enough difficulty navigating the narrow dredged channels without paying much attention to yachts. Of recent years they do, however, once in the Solent, slow down so that at Cowes the peril of being swamped at one's moorings, or swept away from them is somewhat diminished.

At Cowes one must "moor," not anchor, as we understand it, for the swirling, twisting tides are almost sure to cause a foul anchor and consequent trouble. Getting back and forth to shore is most difficult, as the tide against the wind raises a hellish sea, and with the prevailing winds there is almost no shelter available, except up the Medina River where a few small boats may find an uneasy and noisy haven. If a real blow comes — and they do quite frequently — there is nothing to do but up anchor and scuttle to the more protected waters of Southampton or Portsmouth, frequently leaving behind some frantic member of the crew.

Now as to the actual racing. Of recent years all of the yacht clubs of sufficient importance to draw the big fellows start their races off the Royal Yacht Squadron Clubhouse at Cowes, or off the Pier Head at Ryde, a few miles to the eastward. The starting lines themselves are excellent, the actual line being defined by two range marks on shore. The outer and inner limiting marks, between which one must pass when starting, are not necessarily, and, actually, seldom are on the line, but are spread well apart so that the starting line is of ample length. Tidal conditions seldom allow a skipper any choice and at the start there is usually a congested mess at the favorable tidal end of the line. Another pleasant feature is that on both sides of the starting line, and often on it, the largest and bulkiest of the local and visiting steam and Diesel yachts have taken their berths for the week. Besides, the royal yacht and her accompanying guardship, a huge vessel such as the *Nelson, Rodney* or *Hood,* are not far away and are almost sure to be directly on the course. They stay put, however, and are good tidal indicators.

Well, let us assume we have started off the Royal Yacht Squadron Clubhouse and will go the westward first; this is the normal condition and gives us a windward start, or the course probably will develop into a windward one after clearing Egypt Point. If the tide is flood, the yachts will make a series of short boards along the island shore, keeping out of the tide as much as possible. If the ebb is running, it may be better to go across to the mainland. In any event, the tide will be an enormous factor and we shall probably sail a series of short and long boards, watching for shoal water on one shore or the other. The skipper who works the tide most successfully and uses racing tactics to the limit to drive his opponents out into the foul tide, or if fair, to drive or keep them in the slacker water, will take the lead. It is an entirely different game from settling down to a ten- or fifteen-mile beat off Newport, where the tide seldom runs over three-quarters of a knot, compared with the four to five knots in the Solent.

A compass is seldom used on any English boat and normally it is stowed away out of sight. If it is on deck, it has probably not been compensated. The racing instructions seldom give compass courses and they are not needed, as the next mark, or at least some limiting buoy, is nearly always in sight. Due to the strong tidal currents, compass bearings are almost useless; the local racing men come to know the proper courses almost instinctively. A stranger needs to use the compass and must refer frequently to the chart until he learns all the marks. Owing to the large rise and fall of tide, some seventeen feet, it is almost impossible to know what the depth of water will be. Sounding lead and line are in constant use; there is much bluffing and yelling for water, and everybody goes aground now and then, hung up for only a few minutes but sometimes stranded until the next high water. It is, of course, a most risky place to attempt to use a centerboard.

Suppose we have rounded the westerly mark, down towards the Needles entrance. If the tide has been against us, we get an enormous jump on any yachts astern and romp back to Cowes with reaching or running canvas set. If the tide has been fair, the chances are that after rounding we about stay put and all competitors bunch up. Then they split up, some working one shore, some the other, in an effort to beat the raging current. At any rate, we all sail back towards Egypt Point, gradually working more to the south'ard to sail through the starting line and on down the Solent to a mark off Ryde or beyond. Thence we sail back to the start again, probably covering the L-shaped course two or three times more until stopped by the committee.

At all times we are racing through heavy traffic and meeting swarms of other racing yachts of all sizes. Quite frequently the big fellows come booming home on the first round, with spinnakers set and spray flying, to meet a large class of smaller racers starting to windward over the same line which they must cross in the opposite direction. Why there are not more accidents of the *Lulworth-Lucilla* type can be attributed only to the great skill with which the "big 'uns" are handled. Motor boats swarm; trippers to "Around the Royal Yacht, Sir," paddle steamers, cruisers — usually under mere scraps of canvas — naval picket boats by the dozen and Navy sailers of all types cover the water. Large yachts at anchor, an occasional ocean liner or a battle cruiser, all add to the hazards of what the British call yacht racing. Marine obstacle racing would be a more correct term. It is grand sport and a marvelous spectacle.

I never miss Cowes Week if I can help it, but I do not believe that, except in rare instances, it proves much about the relative speeds of the yachts. It does, however, bring out to a great degree skill in helmsmanship and pilotage. I love to watch an old-timer like Captain Mountefield starve his boat just enough to lee bow a tide, or squeeze by to windward of a battle cruiser at anchor, and observe the enormous gain he makes over some poor chap who has sailed his boat beautifully, judged by his headsails, but rottenly considering the tide and the obstructions. Such an unfortunate suddenly wakes up to the fact that he has lost a commanding lead and is well behind.

(Continued on page 114)

"Socker"

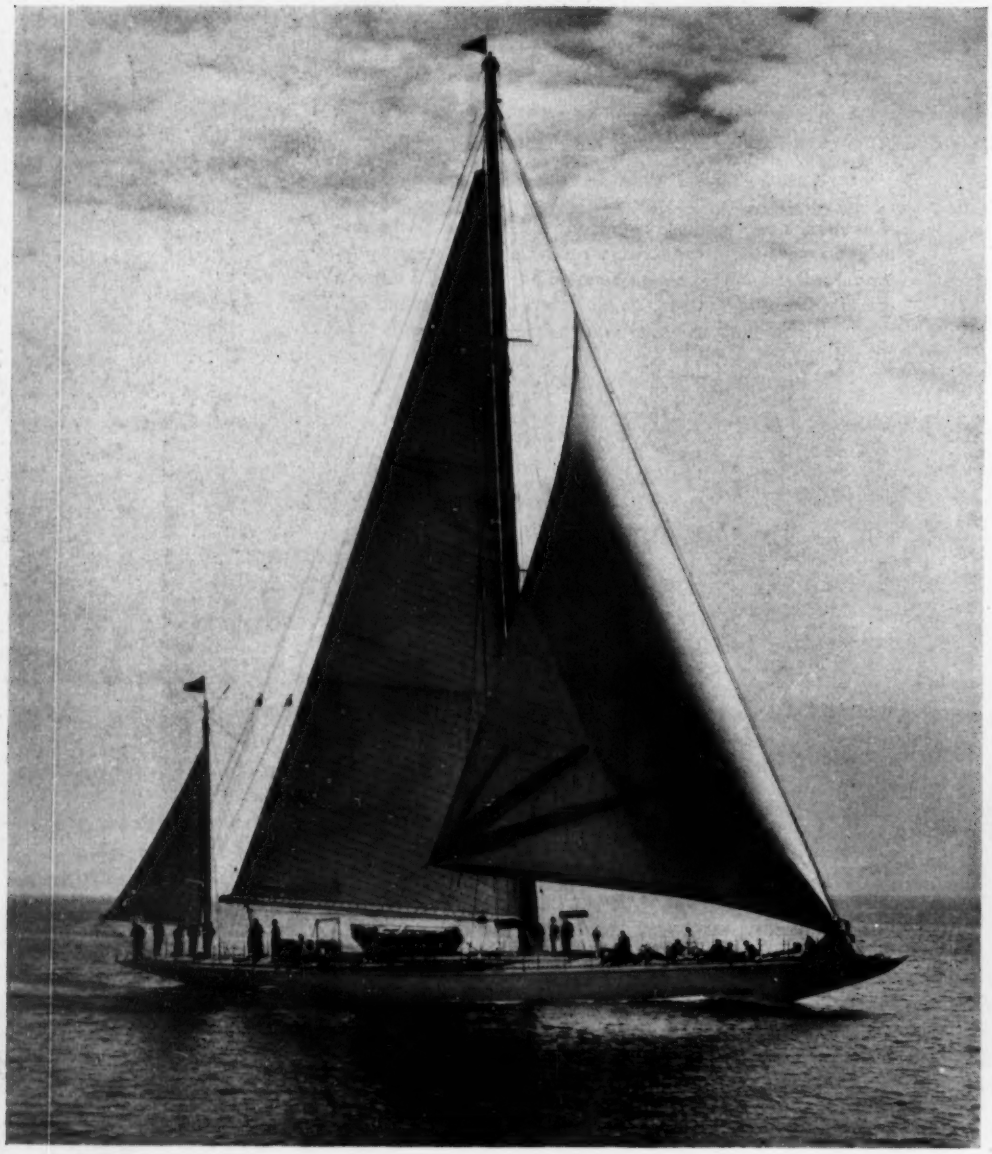
A 46-foot cruiser just delivered to Charles Francis Coe, "Socker" will be used on Long Island Sound for a time and will then go to Miami, her home port. The hull is that of a standard a.c.f. 46-footer, with special layout of living space. Her beam is 11 feet 6 inches and draft, 3 feet. The hull is black, with mahogany houses, finished bright. The deckhouse, which has a clear view all 'round, is shown at the right. It is a sunny and attractive room

M. Rosenfeld

"Socker" has a maximum speed of 18 miles and a cruising speed of 14 to 15 miles. She is powered with a pair of special 6-cylinder Hall-Scotts, of 100 hp. each, with direct drive

The owner's cabin, shown below, is aft. It has two berths, one of them extra wide. The forward cabin, left, has accommodations for three, having a high berth on one side and a transom berth with a folding upper on the other. Toilet room and galley adjoin. Forward are quarters for a paid hand

"Yankee"—Fitted for Her Quest Abroad

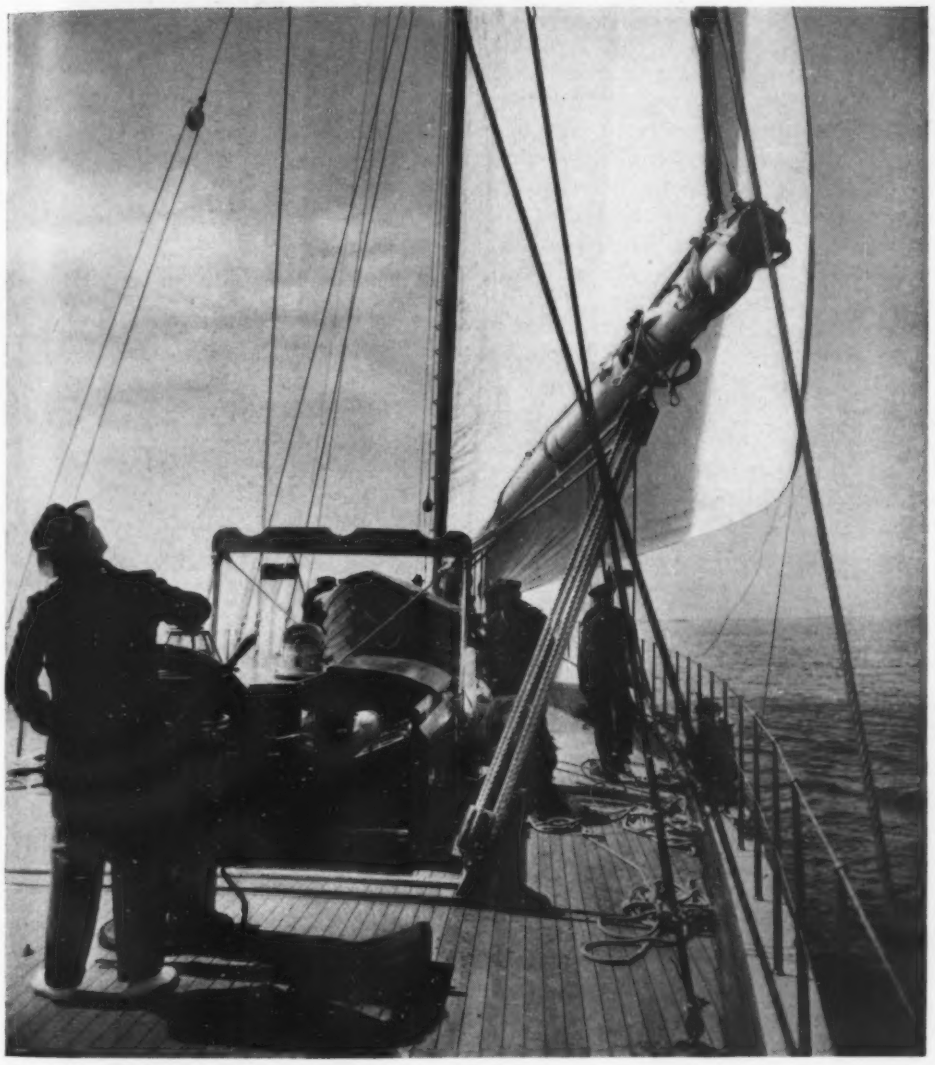


Leaving Boston on April 25th, Gerard B. Lambert's "Yankee" arrived at Southampton on May 13th. She is shown here as she was fitted for her Transatlantic crossing

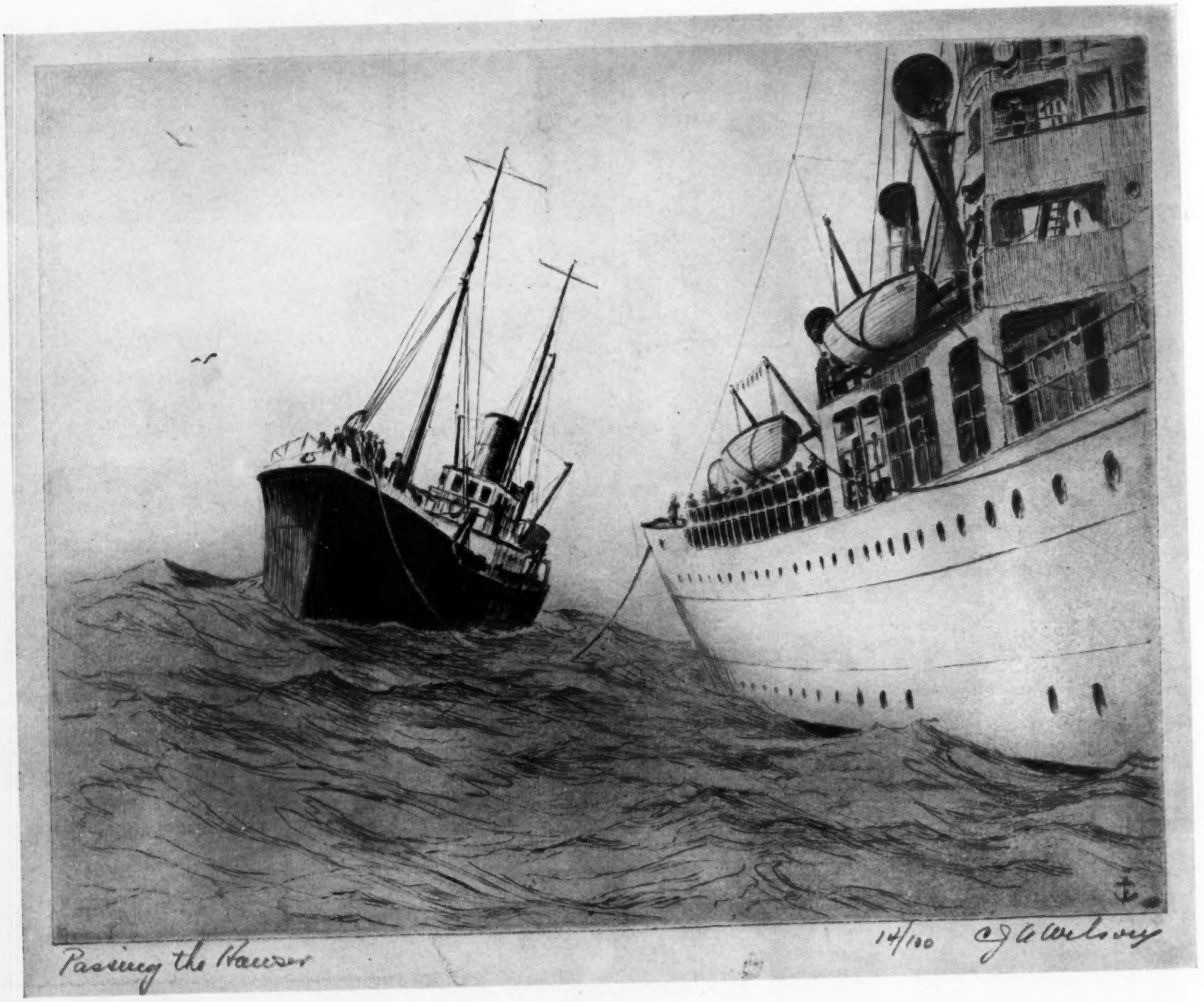
"Yankee" leaving Boston under her seagoing rig. Her original wooden mast, shortened by the height of the jiggermast, was used for the ocean passage, leaving the fore triangle about as it was. Below. Frank C. Paine, in charge of the yacht on her Atlantic voyage, at the wheel

Left. "Yankee's" main saloon is furnished as comfortably as that or any out-and-out cruiser

Below is a view of "Yankee's" deck, looking forward, showing the four dories nested amidships and the life lines and stanchions. At right is the galley. No need to go hungry aboard her



A corner of the deckhouse, showing companionway to the living quarters. In the center is shown the owner's cabin which is finished in white mahogany paneling. At left, the forecastle and a part of "Yankee's" crew



Passing the Hawser

From an Etching

by

C. J. A. Wilson

Christopher Columbus

His Flagship Was Not a Tub but a Clean Lined Craft that Could Make Two Hundred Miles a Day

By GREGORY ROBINSON

THE biographies of Christopher Columbus are beyond counting and are ever multiplying. At every hour, in some part of the round world, a schoolboy pens an essay and writes the illustrious name at the top of the page — we have all written our little piece about the great Admiral of the Ocean. There is rarely much originality in these compositions. The hero is taken out and home quickly, for young biographers write with an eye on the clock and always give themselves time enough to round off with the famous story of the egg. But if the youthful works vary little, the works of the older writers vary much. Up to the present time it would appear that there are eleven cities claiming Columbus as a native, five islands which claim to be his landfall, and you can spell his name pretty well as the fancy takes you — one commentator even going so far as to say that Christopher was spelled John. Turning to his mind, we find the shades of it innumerable; how much or how little he knew, how lofty or how base his motives — these subtleties are ever being weighed and measured by the learned. Generally the results do not shock, but recently I ran against a writer who claims that in 1492, when Columbus sailed out of Palos, he knew very well whither he was bound for he had been across the Western Ocean in 1477.

To support his theory this particularly surprising author relies largely on the fact that Columbus took the best advantage of the winds and the currents on his renowned voyage, both out and home. To accept such an argument is to deny to the man the powers of reasoning and deduction, to deny to him any data on which to reason. Certainly, there seemed more annoyance than surprise at the finding of America, until it was realized that America was worth while; but the evidence that the surprise was genuine is a great deal easier to accept than to add yet another turn to his versatility and to hail Columbus as the world's greatest actor. It would require considerable histrionic power, after having discovered a New World, to pretend you had not. Another modern author, arguing from the same fact, proclaims our hero an outstanding scientist. So we meet them one after another, each with something different to say. Well, what manner of man was Christopher Columbus?

From the mass of fabrication and contradiction it comes clear that by 1492, while Columbus had not voyaged so far nor for so long a period as master mariner as he is generally reputed to have done, he had acquired considerable experience at sea as a commercial traveler. He had worked for the firm of Centuriene of Genoa, general merchants and, in particular, gold dust importers. (A member of the firm is said to have been responsible for the bright idea of the gold standard.) They were big people in the financial world and when prolonged wars had left money affairs in an unholy mess they were called in to assist the great Bank of St. George, whose head office was in Genoa, in straightening out matters. As a result, Europe was helped out of the fire into the frying pan. Columbus traveled in the Levant for the wine department, and later in sugar to Madeira, and by 1478 — when he married the well-to-do widow Perestrello — he had become a man of considerable business capacity. Together with an estate in the sunny little island of Porto Santo, marriage brought him many charts, books and instruments which the late lamented had collected and left to his widow. Geography had been his hobby and he had money to indulge it.

The knowledge of these early connections, business and domestic, are as a spotlight on the interview between our hero and King Ferdinand and Queen Isabella. The romantic picture of the dreamy Italian sea captain in rags fades out and in its place we see clearly a confident commercial traveler with goods to sell. In effect, he said, "twelve and one-half per cent to me of all the gold imported in the first voyage and you supply a ship. Ten per cent to me and my heirs forever of all the gold which may come from the lands I will discover of which I and my heirs will be Viceroys and Admirals — take it or leave it." Ferdinand of Spain, like King Joao of Portugal, thought the price too high, and without wasting any more words Columbus packed his bag for France.

The story goes on that a good priest approached Isabella and said: "Think of the poor heathen who might be converted," and Santangel, financial adviser to the Court, reminded Ferdinand that the port of Palos was in arrears with its taxes and could be ordered to supply the ship, so that there need be no initial outlay. It is not at all improbable that he reminded the King, too, that Lombardy bankers were charging 20 per cent on overdraft. So Columbus was asked to call again and on April 30th, 1492, the business was concluded. And what did Christopher Columbus know?

As a young man in the wine shops down in Sailor Town he had listened and drunk little while the seamen drank much and were loquacious. He had heard tales of men blown far out into the ocean; of the floating forest to the west of the Canaries; he had heard the hard cases — the sceptics of the forecastle — laugh when they heard the tale retold; they had winked at him and said, "seaweed." He had heard of strange flotsam which came ashore in the Azores from the westward. He might have suspected a westerly set branching off from the south-going current when he went voyaging to Guinea. He would have called to mind his old mother doing the family washing in the swirling stream, with the offscourings herding into the center of the swirls. He would have thought and reckoned that here might be a mighty ocean swirl with something out yonder to turn that westerly drift into an easterly current and account for the seaweed in the center — that which we now call the Sargasso Sea. Yes, it is often the application of some childish experience or simple observation which leads men on to great discoveries. Long residence in Madeira and Porto Santo had told him that the northeast trade wind followed the sun away south in winter, and betwixt the Azores and Madeira the wind hung more often westerly than easterly at that season.

Onlookers see most of the game, if they keep their eyes open, and Columbus, with his clear sharp eye and acquisitive mind, had collected much from the conversations of practical seamen. When, later, he acquired Perestrello's charts and books he was able to apply modern knowledge to ancient wisdom. Hippalus, the great Roman navigator, had in the first century noted the working of the trade winds in the Eastern seas; the Hindus had used them time out of mind, and we may be sure it was not by accident that the Canaries were chosen in preference to the Azores from whence to make a departure.

To help the good ships safe to port, he chose men who could be trusted to keep a sharp lookout, use the lead, watch the compass, and observe the pole star — seamen every one — John de la Cosa, master and owner of the *Santa Maria*, and the brothers Martin and Vincent Pinzon, particularly Martin, captain of the *Pinta*, who led the little line of three ships into the New World.

It was sunrise on August 3rd, 1492, when the *Santa Maria*, *Pinta*, *Niña* slipped out of Palos and laid a course for the Canaries where they prepared themselves for the passage. On September 6th they left Gomera, but it was not until the 9th that they cleared the baffling calms of the islands and, through the tumbling, confused seas at the edge, came to the more regular swing of the trades. With what relief to them the Island of Ferro melted into the blue and purple and silver of the clouds on the eastern horizon those know best who have projected a long voyage, who have made a resolve and pursued it. We may be sure that Columbus, whose disappointments and vexations had been of long continuance, slept soundly the night he was shut of the land, and when in the morning watch he came on deck the sparkling, fresh northeaster blew the cobwebs out of his mind and the gold dust out of his eyes as he stood Admiral of the Ocean.

Fair wind and fine weather, with the clouds marching steadily in good order from horizon to horizon by way of the arch, such was the order of the day and of every day. Porpoise, sheering close across the stem as though they would read the draft marked upon it and thereby better pilot the ship; birds over her wake as whippers in; seas hustling at her quarter, then passing swiftly ahead, leaving thin lines of foam as though they offered a tow — all seemed to entice, nothing to check the westward way. To those on board who knew the world was round came no fear, but to the others who pictured an edge and then Eternity there was dread — for they had not all been too good, not all those men who signed on in Palos. So from sunrise to sundown they sailed on — gold in the morning, silver all day, gold in the evening, and at night the heavens were spangled with it.

When the trades blew fresh of nights and seas broke under their bows, the sound, they said, was as the sound of the trees when hard winds blew at home in Andalusia. As the darkness shut down, they always shortened sail for fear of running unawares upon one of those islands with which cartographers were wont to decorate their work. One such island we know appeared on a chart for no other reason than to give pleasure to the painter's wife. They were fortunate, however, in not having the anxiety of traffic, for the North Atlantic was a lonely place in 1492. We may imagine that the masters and their mates in the little flotilla had enough experience of seamen, in particular, and folk, in general, to know that work is the best cure for worry and the hands were kept pretty busy. Likely enough, had the masters' logs survived, we should have read— in Spanish, of course — of the "hands employed on various jobs, weather the same, winds northeasterly," day after day. Doubtless, too, the watch below slept soundly, turning out to grouse at their grub, and (under their breath) curse the boatswain when he turned them to. Sailors, they say, don't care; but, more surely, sailors don't change.

At last the winds came variable. The scent of burning wood now and again, land birds resting on yardarms, driftwood and other signs several times led to the reporting of Cape Flyaway.

At ten o'clock on the night of October 11th, Columbus thought he saw a light. At 2.00 a.m. on the 12th, just four hours afterwards, he saw a light beyond a doubt — the flash of the *Pinta's* gun as she sighted the land dead ahead. It was the prearranged signal. Roderick de Triana was the man who sang out from forward in the *Pinta*, and soon every man Jack in the ship saw it as plain as a pikestaff — breakers on a sandy beach capped with a row of dark trees. It was then that Martin Pinzon shattered the silence of the darkness and, slowly coming to the wind, waited for the others to come up. At daylight they anchored under the island which the Indians called Guanahani and which Columbus christened San Salvador.

For hundreds of years the identity of this spot was lost amongst the seven hundred odd cays and islands of the Bahamas; then, after much disputation, the opinion of Admiral J. B. Murdock, U.S.N., endorsed by the British Admiralty, was accepted and an Act of Parliament was passed granting to Watling Island the honor of the historic landfall. This was in 1926. The Act reaches back far. When Roderick de Triana came home in 1493, he put forward his claim to the 10,000 maravedis a year which had been promised to the man who first sighted land, only to find that the Admiral himself claimed it on the strength of the light which he maintained he saw in the night. The Admiral won. Unfortunately for Roderick, his good captain, Martin Pinzon, had died two days after reaching Palos — died of grief they said, but I do not believe it. Had he lived, it is sure he would have stood up for his own man; he would have asked Columbus why, believing he saw a light on land, he did not fire a cannon? Why he did not take a bearing and sail in upon it? He claimed to be a seaman; then why? That is about what he would have said. But Roderick de Triana, though he had it in his head, doubtless never got it beyond his throat; he came out purple and spluttering, shipped away for Barbary and there turned Turk. Now, by Act of Parliament, Roderick, rather late in the day, is proved right, for if you will look at the chart you will see that there is no land out to windward of Watling Island and all the islands in the Bahamas lie low. A native canoe? Commander R. T. Gould, R.N., pertinently asks what she was doing 35 miles off the nearest land and dead to windward? In any case, a canoe, with an Indian lighting his cigar, does not constitute a landfall. Perhaps, from off the land that night, gold dust was blown into the eyes of the great Admiral. In the morning it was in the eyes of all that company.

But it never blinded Columbus completely as it did some of those who displaced him soon afterwards. Thank heaven, we have not to tell their story here, for it is, indeed, an ugly one, the story of the little hell they made of Hispaniola. He came out to barter for gold and made no secret of it and, since he was working on a percentage basis, he wasted no time. The quest which began decently enough on October 12th developed eventually into that insane lust which gives the substance as it takes away the sense to enjoy. The Indians of Darien conceived the happy thought of putting gold at the ends of their arrows, hoping thereby to tempt the Spaniards to stoop and, thus catching them bending, slay them with the more ease. The story stands as a humorous savage comment on a civilization which has lost its humor.

The *Pinta* soon parted company and shortly afterwards the *Santa Maria* was wrecked and Columbus transferred himself to the *Niña*. Settling 38 people at Navidad, in Hispaniola, early in January, he set sail for home alone, but on the first day out he fell in with the *Pinta* again. Where Martin Pinzon had been and what he thought of it all we shall never know with certainty, for we have only what is written in the journal and the reported conversations of the Admiral. From these sources we gather that Martin Pinzon was ambitious. The passage was made largely in the latitude of the Azores, the track which afterwards became the recognized way home.

The magnificent reception Christopher Columbus received on his first return and the subsequent discredit and neglect need not be here recounted. He was a wise man and old, so that the discovery that kings and princes do not always stand

by a contract surprised him less, perhaps, than the discovery of America.

+ + +

Now a word about the ships. The *Santa Maria* was three-masted, having a fore and mainsail square, a mizzen, a maintopsail, and a spritsail set under the bowsprit, and she is said to have been of 100 tons. These are the only facts we have to work upon. It is as well to be plain, for the production of two full-sized models, one of which has been reproduced in miniature again and again, has given an idea of certainty which the scanty evidence does not warrant. Although we do not know the order in force as to measurement in 1492 it would seem that the method used in Spain a hundred years later was:

$$\frac{(\text{Length between perps.} \times \text{mean breadth} \times \text{depth in hold})}{80} - \frac{1}{20} = \text{burden, adding one-fifth for gross tonnage.}$$

The contemporary English method ignored the length between perpendiculars. It was:

$$\frac{\text{Keel} \times \text{breadth} \times \text{depth in hold}}{100} = \text{burden, adding one-third for gross tonnage.}$$

The divisor varied between 90 and 100, but was generally nearer 100, and there were other small variations which need not be gone into at the moment. About this time a Spanish merchant ship which changed hands was found to be one-sixth less in English than her original gross tonnage, so that the *Santa Maria's* 100 Spanish tons, with her fifth added, would be 120 tons gross, while by English measurement she would be 100 tons gross and only 75 tons burden.

We have the dimensions of three English merchantmen of the period. Their average proportions of Keel : Breadth : Depth is 4.26 : 2 : 1. Cargo carrying being a matter of pure economics, the proportions are likely to have been fairly constant the world over. As to the relation of keel length to l.b.p., a common proportion would be about 5 : 7, and a full breadth of 20 feet would be about 16 at the half height. With these figures in mind, let us see what can be done.

$$\frac{42 \times 20 \times 9}{100} = 75.6 + \frac{1}{3} = 100.8 \text{ tons gross.}$$

$$\frac{59 \times 16 \times 9}{80} - \frac{1}{20} = 100\frac{72}{80} \textit{ tonelada} \text{ or Spanish tons} + \frac{1}{5} = 121 \textit{ tonelada}$$

On this showing the *Santa Maria* might be: 59′ l.b.p., 42′ keel, 20′ beam, 16′ half breadth, 9′ depth in hold.

The *Pinta*, of 50 *tonelada* or 33 tons burden, English: 47′ l.b.p., 30′ keel, 15.5′ beam, 11.5′ half beam, 7.5′ d.h.

The *Niña*, of 40 *tonelada* and 30 tons burden, English: 46′ l.p.b., 30′ keel, 14′ beam, 11′ half beam, 7′ d.h.

The figures of the well-known *Santa Maria* reconstruction of 1892 were: 74′ l.b.p., 60′ keel, 25′ beam. They were based primarily on what was believed to be evidence of the size of the flagship's boat, but R. C. Anderson has shown that this evidence is non-existent. Secondly, reliance was placed on the ship's complement. It is known that altogether there were 87 people in the three ships and 40 is the number generally allotted to the *Santa Maria*.

The proportion in merchantmen of the period is believed to have been one man to every five tons, which would give a ship of 200 tons, but this evidence is disputed and speculative for it is reasonable to suppose that in the special circumstances of the voyage the ship would have had many supernumeraries. Certainly, in one hundred years there is likely to have been some modification in the method of calculating tonnage but it is unreasonable to accept an error of 100%.

Leaving the tonnage for the moment, let us turn to performances. Departure from Ferro to the landfall at Watling Island is 3,100 miles by the shortest route; therefore, the average speed was little more than 4 knots. But the best day's run is recorded as 200 miles, which means a speed of 8½ knots. The highest speed of the replica of 1892, when she was pressed, was only 6½ knots, rather pointing to an error in design. But there is one detail common both to the 1892 and the 1929 reconstructions which must have reduced the speed of these vessels considerably and that is the position of the external vertical timbers or upsparrings, the heels of which are brought so near the water that the slightest list would put them right in — a sad check to the way of the ship. The authority for the position of the heels is doubtless some pretty picture, but in dealing with practical affairs the rule should be: jettison the artists. The men who built the ships which made the memorable crossing had behind them the tradition of the Phœnicians and the Carthaginians, people who did big business in great waters; they knew that a ship must have an underbody as clean as a smelt or she would not go.

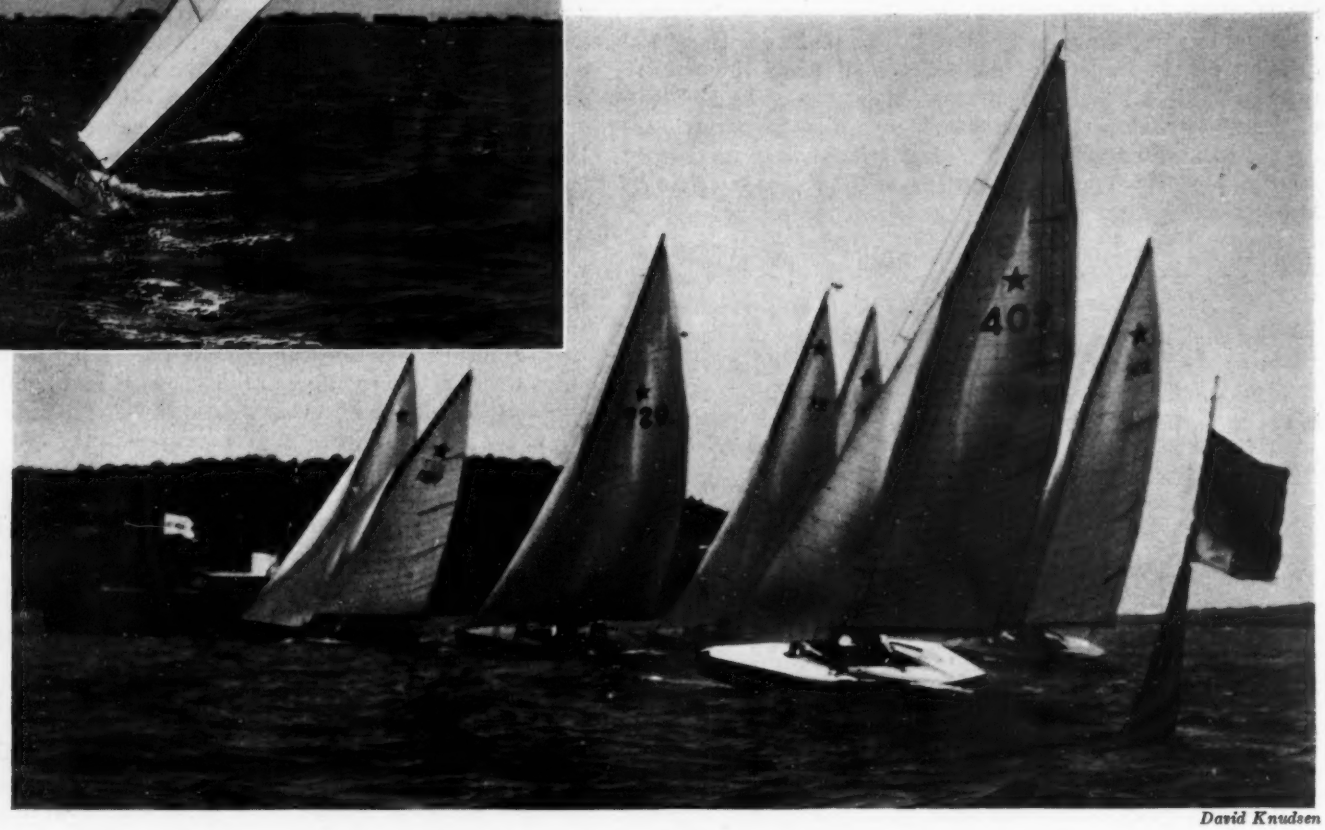
I do not think there are many speed records in the fifteenth century, but in 1525 four ships ran home from Porto Rico to St. Lucar Bar in 25 days. That is a distance of at least 3,600 miles, and they must have been ships with clean runs. In 1575, Drake came from the Florida Channel to the Scilly Isles in 23 days in what is described as a small Spanish frigate. That is very good going. Of course, these passages are not comparable with *Dorade's* 17 and *Landfall's* 19 days by the longer route, but it does rather look as if, had Drake delayed his passage until 1926 and fallen in with *Jolie Brise* off the Bermudas, Martin (George, not Pinzon) might have found himself entertaining Master Francis Drake at breakfast any morning on the voyage home to Plymouth.

Unfortunately, we do not know the sail area of the *Santa Maria*, but we are not likely to be much out if we make the height of her topsail yard from the water line equal to her water line length, and her main yard a little more than twice her beam. The topsail was small and was probably not sheeted out to the yardarm; the sizes of the foresail, mizzen and spritsail can only be guessed. It seems that the *Pinta* was square-rigged, certainly on the foremast, before she left Palos, and that the *Niña* was converted at the Canaries, but details are scanty and the wise artist (for the present) will put both the smaller ships out of sight and the flagship hull down, for the arrangement of *Santa Maria's* upper works is none too sure.

The English ton measured 60 cubic feet, and originally two butts went to the tun of wine. In Spain the *tonelada de arqueo* measured only 53.44 cubic feet, so that the *Santa Maria*, in her ordinary trade, would have had 5,344 cubic feet of cargo space in which were stowed 200 casks, but I do not suppose she was filled up to her coamings when she went west and room would have been found in the hold for many of the crew. Nevertheless, it does not leave much accommodation in her ends, and it is probable that between main and mizzen, superstructure of about the scantling of a hen coop gave sleeping space for some of the extra people. If Columbus occupied what was usually John de la Cosa's berth, Master John made shift with a box about the size of a large kennel on the poop. I imagine that in none of this additional accommodation would there have been full headroom and that although it made a little extra windage it did not imperil her stability.

(*Continued on page 116*)

Adrian Iselin scored a double victory with "Ace," winning the Spring Championship and the Open Series. He also topped the list in the international team racing. Below, the Stars sail across the line in close formation



David Knudsen

American Stars Clean Up in Bermuda

"Ace" Wins Double Victory in First International Star Series Held in the Islands

SHUFFLE the Star Class pack as much as you please these days and, like a conjurer, Adrian Iselin will bring the *Ace* out on top. And so it came to pass that history repeated itself again at Bermuda during the second week in April, when International Star racing made its official début in the land of the Easter Lily. Out on the crystal clear green waters of Great Sound, this veteran skipper from Western Long Island once again piloted his *Ace* to a double victory, winning the Bermuda Challenge Trophy for the Spring Championship, and the Royal Bermuda Yacht Club Trophy for the open series, also consisting of three races. It was an exact duplication of his performance last January, at Havana, and makes four consecutive major Star events which this skipper has now won in as many months — a record unparalleled in the annals of the class.

The Bermuda races, which were most efficiently conducted by the local race committee and were free from protests or disqualifications, were sailed under clear skies and almost ideal weather conditions. The yachtsmen were favored with brisk northerly and westerly winds, spanking rail down breezes averaging from 14 to 16 knots, which moderated slightly as the week of racing drew to a close. There was quite a chop on Great Sound, but no real sea on this well protected body of water. This was racing of a different type, indeed, from the heavy seas encountered off the coast of Cuba, or the placid drifting matches on Long Island Sound, and is further proof of Iselin's versatility. Even though he had Ernest Ratsey as crew, Iselin faced a much higher caliber of competition in Bermuda than he did in Havana — not so much from the local sailors, who are still new to the Star Class, but from other challengers from the States. In at least two of the other boats were combinations of talent that would be dangerous in any company. Sampson Smith, for several years champion of the Inland Lakes, had no less a personage tending jib sheets on *Pathfinder* than Frank Robinson, of the Peconic, with his wealth of Star experience. Frank Van Winkle, another veteran, but one who has never wandered far from home before, had as crew in *Shucks* the famous John (90 per cent) Atkin, who in this case contributed ninety per cent of the weight in the boat, if nothing more. It is, therefore, all the more to the credit of young Tom Whittelsey, who had only his little sister Katherine to assist him, that *Argo* made such a splendid showing in both series, never finishing worse than third in any of the six races.

Taken as a whole, it would seem at first glance that Iselin had things pretty much his own way. If, however, each event is considered separately, it will be found that such was by no means the case. Of the open series, there is little to relate. This proved to be almost a sail-over for the *Ace*, Iselin winning all three races by an easy margin. It seemed almost as if his rivals were willing to concede this lesser event to the holder of so many championships and were conserv-

(*Continued on page 123*)

"Viking" Takes Prince of Wales Trophy

By

GLEN PERRY

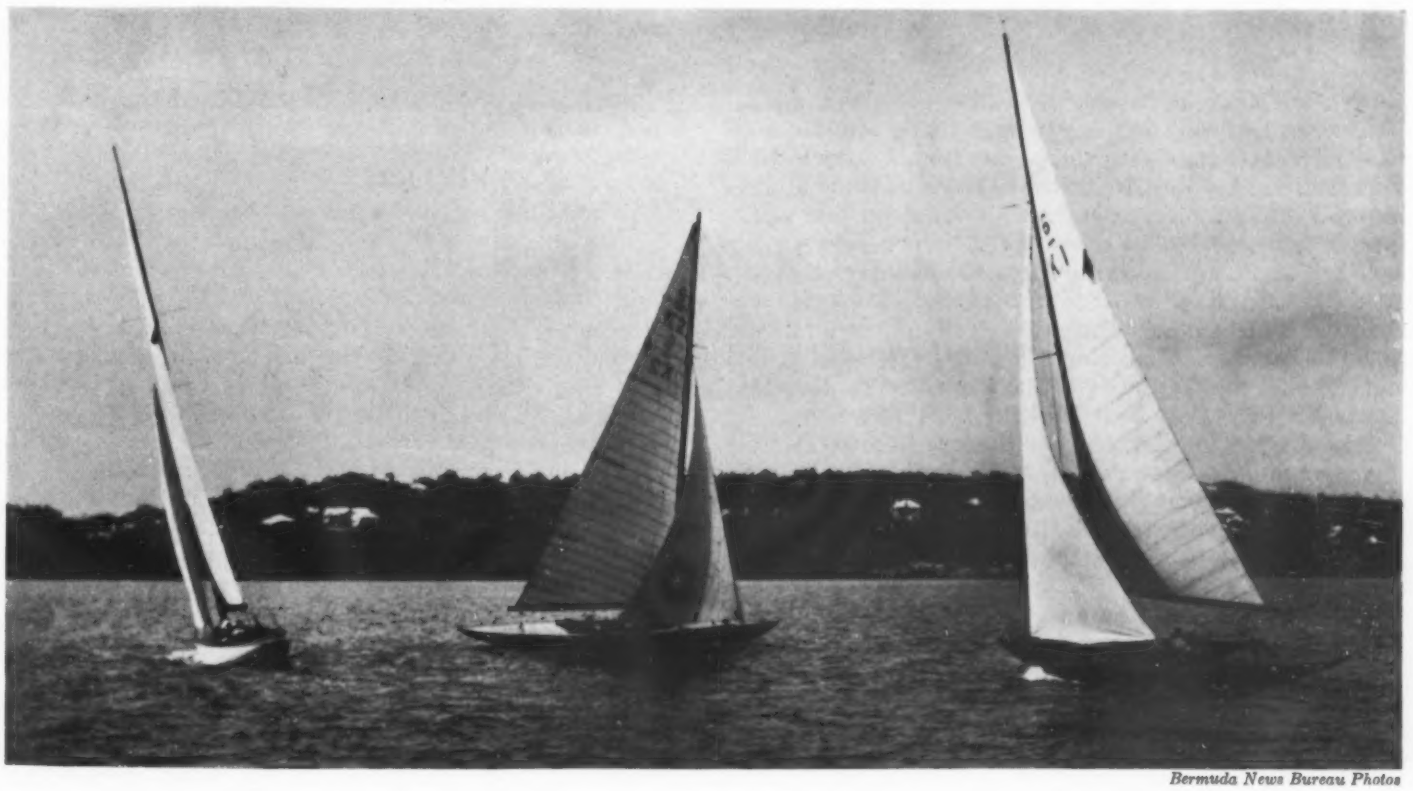
FROM the standpoint of excitement, almost any series of races run on the basis of a cumulative point score offers more, both to spectators and competitors, than can a single race, no matter how closely contested it may be. The reason for this lies in the constantly shifting picture — the gradual sifting out of the slower boats in the fleet, and the accompanying increase in tension among the leaders.

The regatta sailed late in April on Great Sound, Bermuda, for the Prince of Wales Trophy is a case in point. *Viking*, owned and sailed by Kenneth and Eldon Trimingham, finally came through to win from five other Six-Metre sloops, leading another Bermuda craft, *Achilles*, by exactly a quarter of a point. The first American "Six" was *Jill*, under charter to Chandler Hovey, and sailed by his daughter, Miss Elizabeth Hovey. She was third, a point and a half behind *Achilles*.

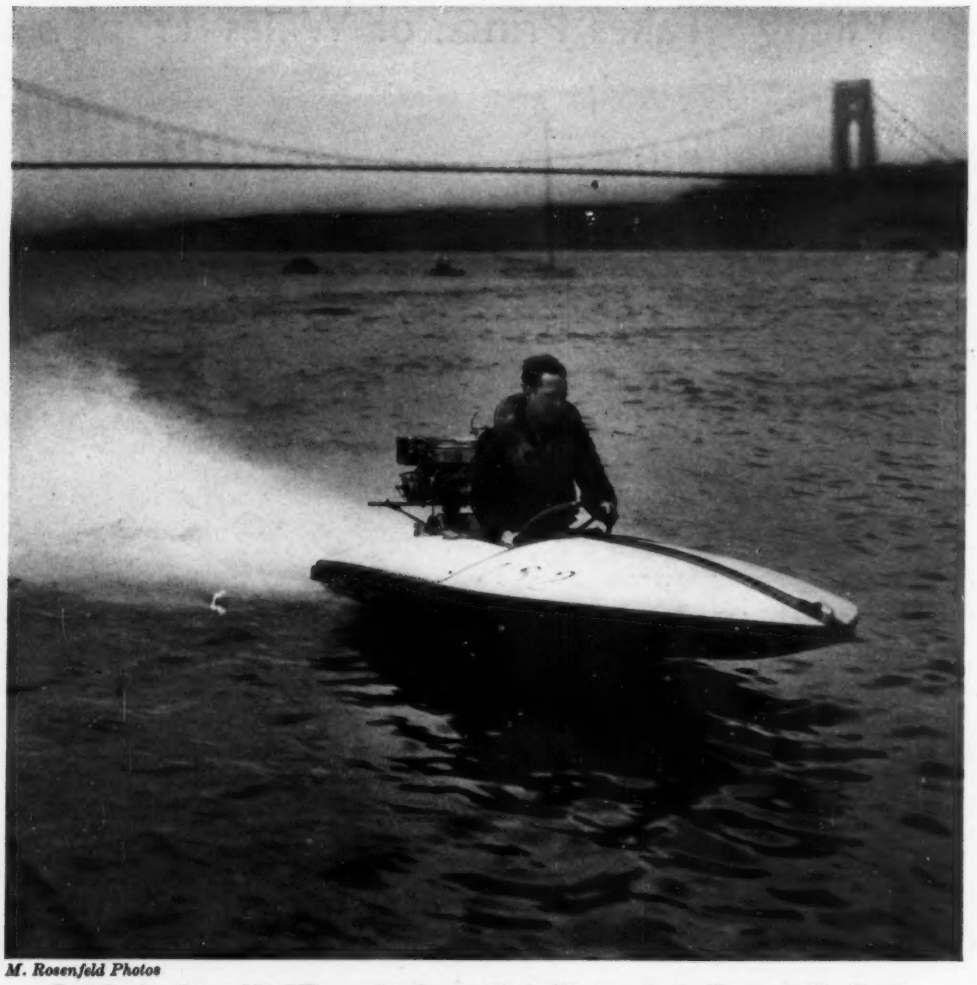
Four races were sailed, two being won by *Jill*, one by *Viking*, and one by J. Seward Johnson's *Swallow*. *Achilles* carried off three seconds and a third. *Viking* had, in addition to her one victory, a second and two thirds. *Jill's* failure to "come through" lay in the fourth and fifth places she tacked on to her two triumphs. *Swallow*, Lloyd Jones' *Sea Venture*, and Paul Shields' *Challenge*, never threatened the leaders in the point score, although the last-named, in spite of finishing last in the standing, held a strong position — first, second or third — at some

(*Continued on page 122*)

"Jill," ably sailed by Miss Elizabeth Hovey, and Eldon and Kenneth Trimingham's "Viking," winner of the Prince of Wales Cup. Below is the Bermuda team of three "Sixes" which repelled the American invasion, "Achilles," "Sea Venture" and "Viking"



Bermuda News Bureau Photos



M. Rosenfeld Photos

Fred Jacoby, Jr., and his "Flyaway" took a terrific drubbing to win the Haynes-Griffin Trophy

A Long, Tough Grind

Fresh Winds and Steep Seas Make It Hard for the Albany-New York Racers

SAILORMEN know what a weather-going tide will do when the wind has any weight to it, and the contestants in the eighth annual race from Albany to New York, run on May 12th, found the river above Poughkeepsie whipped into an angry, steep sea by the flood tide and a spiteful northeaster that drew straight down between the high banks. From Albany down to the halfway mark the little outboards dove into a nasty short sea that took them almost — and sometimes altogether — out of control. By the time the leaders reached Poughkeepsie, the tide had turned and the wind eased up so that from there down to the finish line at 200th Street, New York, a little way above the George Washington Bridge, conditions were better. Of the seventy-five boats that started, a mere two dozen reached the checking station at the Poughkeepsie Yacht Club, and but seventeen finished within the time limit. Three more crawled into New York after the gong had rung and were not timed.

William Feldhusen, who won two years ago, went out a few miles below the start with a frozen piston. Gar Wood, Jr., did not get below Rondout; Heinz covered barely five miles down river from the starting line. A. Wullschleger, of Larchmont, telephoned to the committee that his boat came apart and sank off Catskill, and the upper reaches of the Hudson defeated "Chart" Johnson, winner of last year's marathon, when his light hull swamped off North Germantown. Many others went out in those wind-whipped waters. And there was plenty of grief for those who got through, for the river was rough and there was little chance to find quiet water as the northeaster whistled downstream against the flood tide.

The outboard runabouts, big husky boats that look like glorified dinghies, suffered less from the rough water than did the tiny, lightly built hydroplanes. The latter were slowed up seriously, taking from half an hour to an hour and a half longer to cover the stretch above Poughkeepsie than the slightly shorter distance from there to the finish line.

Twenty-four boats reached Poughkeepsie, their drivers battered and weary, and twenty-one of them set out on the home stretch under better conditions. From there down the water was smoother and the going easier. But it was a slow race, compared with other years, and it was not until eleven o'clock that the loud speaker on De George's boathouse, used as committee headquarters, announced: "Boat Coming!" Then the watchers saw a spot of white spray with a dot in the middle of it coming down river. It was *Flyaway*, Class C-II, driven by Fred Jacoby, Jr., of North Bergen, N. J. He finished at 11:04:57, having made an average speed of 37.347 miles an hour for the 129¾-mile course. He put his

The outboard runabouts, with their long keels, good freeboard and husky construction, suffered less than the lightly built hydroplanes

Ted Roberts (left), second of the fleet to finish, and winner in Class A, repeating his 1934 performance

Edison Hedges (bottom) captured first honors in the 225-Cubic-Inch Class with his "Universal Eagle"

boat through her paces for the photographers and newsreel men and then awaited the next comer.

Nearly twenty minutes later, and just as the Dyckman Street ferryboat was nearing the New York shore, Ted Roberts came tearing down river. Just after he had crossed the bow of the old side-wheeler, his motor died. He started it again in an instant and crossed the line to win in Class A-II.

Then there was another wait and along came the first of the outboard runabouts, a husky Lyman boat driven by Arthur Baldwin of Freeport, L. I., who had averaged better than 30 miles per hour for the course.

Next to arrive was *Universal Eagle*, owned and driven by Edison Hedges, of Atlantic City, N. J., a "125" racing in the 225 Class. Her average speed was 40.469 m.p.h.

Then came *Dot*, another runabout, driven by Wesley Carman, of Freeport, with *Dragon V*, the little red hydroplane outboard driven by Sam Crooks, Rutgers student-veteran, close astern. Crooks had his boat swamped off Kingston Point but bailed her out and went on to capture the honors in Class B-I. He was the first amateur to finish. Henry Slocum, another Freeport entry, crossed the line some twenty minutes later in an outboard runabout, with Marshall Eldredge, Class C-II, five minutes astern. Eldredge, who had taken a terrific beating above Poughkeepsie, was about ready to withdraw but changed his mind and went on to take fourth place in the professional outboard class.

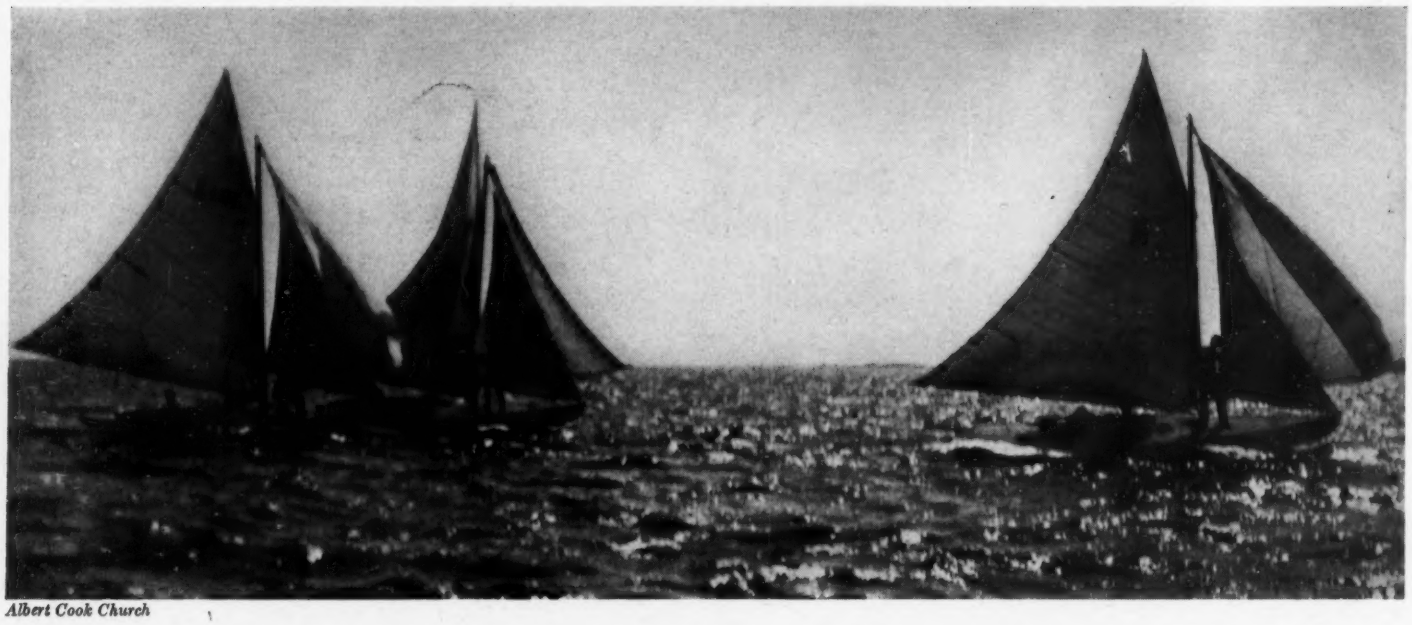
After that nine more straggled in, among them

(*Continued on page 126*)

The New "Wishboom" Rig and Sail Plan

By

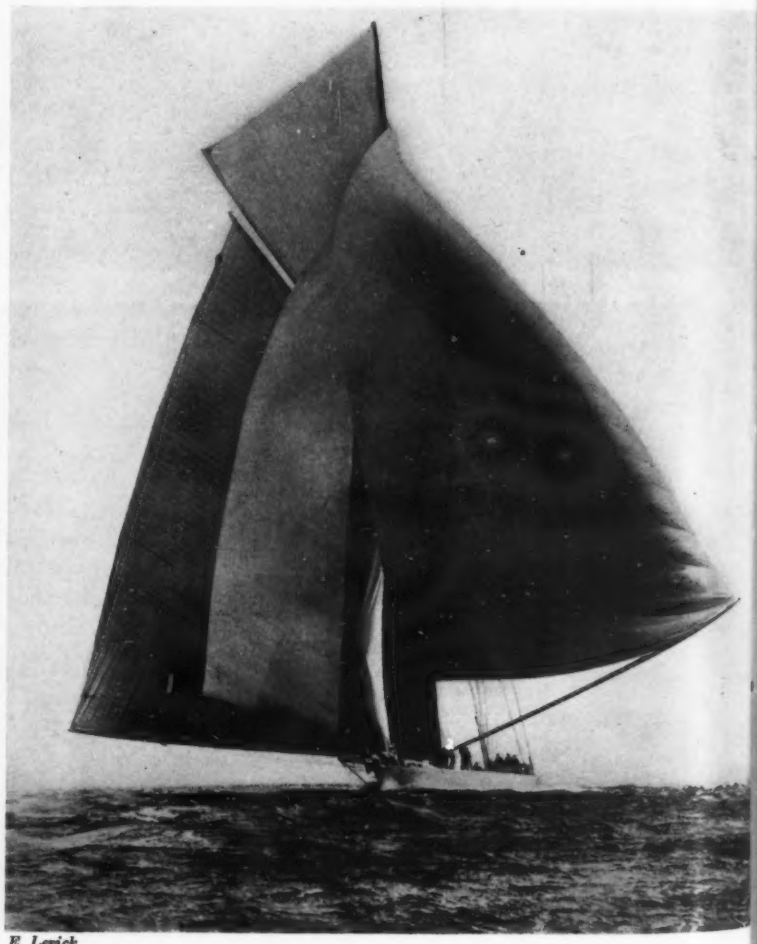
C. W. HAFFENREFFER



Albert Cook Church

The gaff rig seems out of date today. Note the long foot and short hoist in these Buzzards Bay 15-footers, designed in 1898

Below. "Reliance," defender of the America's Cup in 1903, carried 70 foremast hands to take care of her 16,000 square feet of sail. Whereas the last successful defender, "Rainbow" (right), needed only 25 to handle her 7,500 feet. Yet the latter made as fast time around the course as the former



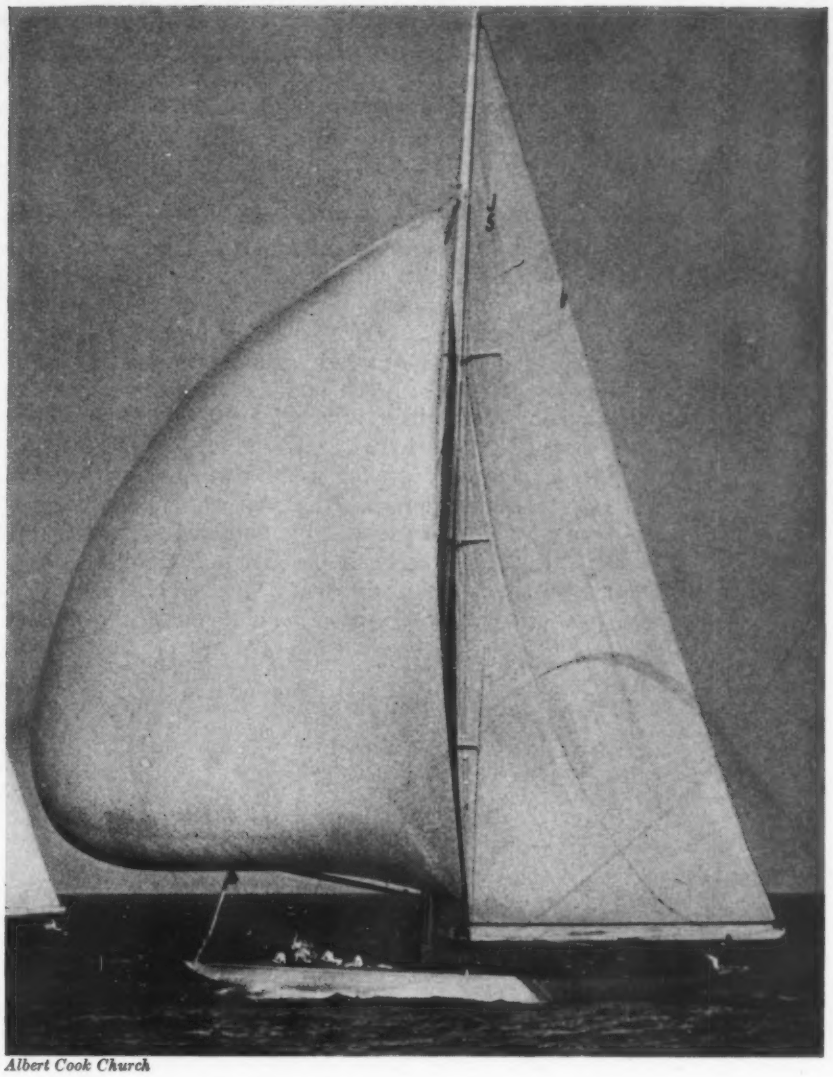
E. Levick

HULL design, interior layout and sail plan are the three elements which are combined in the creation of a sailing yacht. The hull design and sail plan (or rig) are vital factors in all sailing craft, large or small, while the interior layout is a consideration only in yachts of sufficient size to allow for living quarters.

It will be generally conceded by most naval architects, I believe, that the design of sailing hulls has progressed to a stage beyond which there is little or no opportunity for major or radical improvement. There have been — and will be — great strides made in methods and materials. The extensive use of stainless steel in fittings as well as in rigging; the recent advance in the use of electric welding; and, even more recently, the development of an absolutely weatherproof phenol formaldehyde bonded laminated wood for exterior or interior use in hulls, are but some of the many current examples of progress in this direction. With all this, however, the possibilities of radical trends in the "shape" of the vessel are slight. Let us not for a moment gather from this statement that naval architects have, or ever will, agree that one specific model is the *ne plus ultra* creation and can be established as a universal standard. This, fortunately, is not the case. In the first place, there are various types of yachts, each type created and adapted for the special purpose for which it will be used, whether for racing, afternoon sailing, or deep sea cruising. In the second place, should such agreement be reached, architects would soon find themselves without a livelihood. What has been agreed upon, however, are certain basic fundamentals, which allow for a large degree of variation in their interpretation.

The interior layout is more a matter of personal fancy than one of engineering technique, although there is a very definite knack in arranging the layout to get the greatest amount of comfort in the least amount of space. The trend today is definitely towards getting more rather than less stowed below decks. The new owner is determined to get all the conveniences and comforts of home aboard his yacht. At the same time, he practices strict economy in specifying her over all length. Here again, new materials have come to the aid of designers and builders.

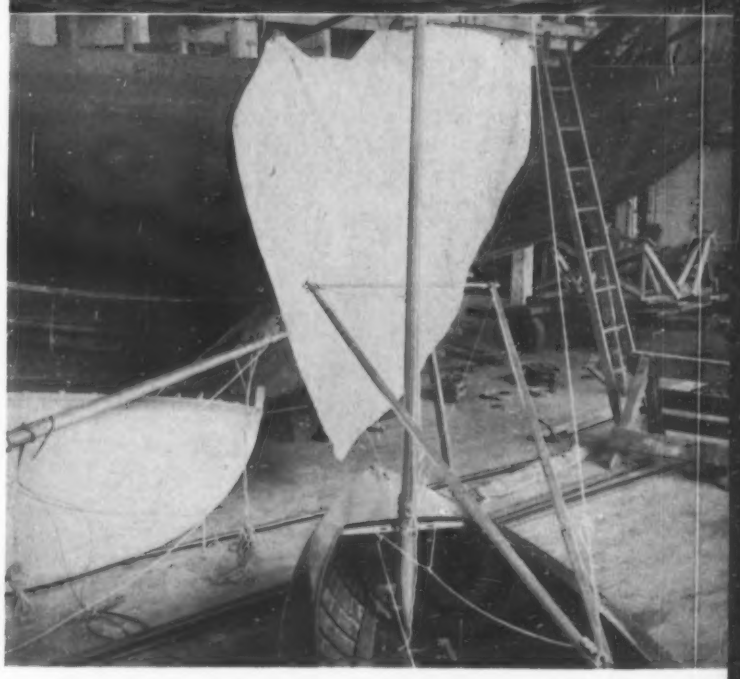
The greatest opportunity for development lies in the sail and rigging plan. It is with this phase of design that this article will deal. It is only within the past few years that any extensive re-



Albert Cook Church

search has been undertaken in the aerodynamics of sails and their accoutrements. Some fifteen years ago, the leg-o'-mutton — also known as the Bermudian and Marconi — rig was introduced to supplant the "Model T" gaff rig. Nathanael Herreshoff, together with some other pioneers, developed the leg-o'-mutton and made it standard in spite of the deluge of unfavorable criticism from the exponents of the old gaff rig. The new rig, at first called Marconi because of the tall mast's resemblance to the wireless poles of that day, was made possible through the introduction of a wire rope whose stretching factor had been reduced to a minimum. This new material permitted the guying and staying of masts to unheard of heights. With the introduction of hollow masts, built up from many scarfed staves and glued together, the topmast was eliminated, the construction permitting single spars up to at least 168 feet in length, the tallest yet constructed being for the *Vanitie*, in 1932. Canvas could now be placed where it would be most efficient and effective — and the driving area or leading section of the sail was greatly increased in height.

In the old days as much canvas was crowded on as possible, with little or no regard to its location, shape, or ease of handling. Not many years ago the defenders of the America's Cup carried 16,000 square feet of canvas, while today they carry but 7,500. The crews of former Cup defenders numbered in some cases as many as seventy, while today twenty-five paid hands are



A Class S one-design sloop (top), designed in 1918, and one of the first classes to carry the so-called Marconi or jib-headed rig, taller and shorter on the foot

By 1932 the mast is still taller, the sail narrower, and a permanent backstay has been provided. A Fishers Island 23-footer (center)

The triangular boom, developed by Herreshoff, as carried on sailing dinghies and for cat-rigged boats

The wishbone boom, looking from the clew forward, on an experimental boat with sloop rig

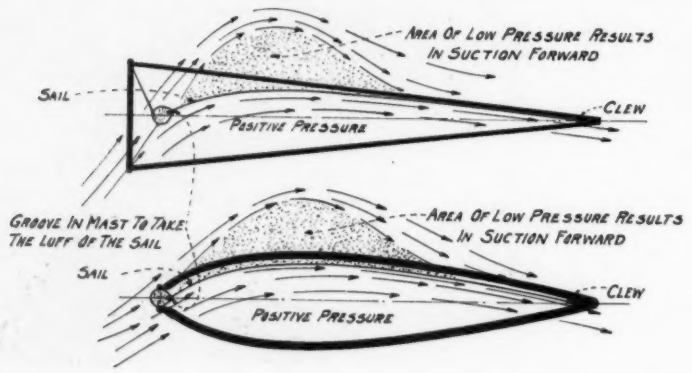
carried. And the modern yacht goes just as fast, if not faster, than her predecessors.

During the past ten years the Herreshoff engineers, helped by the experiments on modern aerofoils, have made extensive studies and wind tunnel experiments with all manner of sail plans and rigging, hoping through these tests to produce for yacht use a form improved over that of the now accepted Bermudian or Marconi plan. In collaboration with his famous father, Captain "Nat" Herreshoff, A. Sidney Herreshoff developed a loose-footed sail supported by either a curved or triangular-shaped boom, the former for larger yachts that carry headsails, the latter for small cat-rigged dinghies. Through aerodynamic investigation, it has been definitely proved that about 85 per cent of a sail's driving power is in its forward third and, what is more startling, that 75 per cent of this section's effectiveness is caused by the area of reduced pressure on the lee side of the sail and not, as was generally believed, by a positive pressure on the weather side. The leading third of a sail, propeller, or airplane wing is most effective because it is naturally this portion that enters the undisturbed element first, while the effect of the remaining sections is confused by eddies and other opposing currents.

It is interesting to note here that the accepted theory of airplane wings is that the area of reduced pressure or suction on top of the wing section, and not the positive pressure on the bottom, is responsible for the lift of the plane. This being the case, it is important not only to make the forward third of the sail as tall as possible, but so to guide the air stream as to enlarge and intensify the area of reduced pressure. Because this is best accomplished on an airplane by a cambered wing, Mr. Herreshoff set about the making of a sail of the same general contour. Being loose-footed and having an adjustable clew outhaul, the draft or camber of the sail is readily adjustable to varying wind velocities. In other words, the sail can be made to belly or to set flat at the will of the helmsman. Furthermore, because the boom is attached to the main spar well up on the mast, it has a tendency to hold the sail from riding up when sheets are well started or when running winged out.

With these elements perfected on paper, several experimental boats were constructed to ascertain whether or not the idea was practical in actual operation. These boats have been tried out under all conditions for several years and have proved beyond doubt that the sail plan is more efficient than any yet conceived. At first blush, the "wishboom" (so called for want of a better name and derived from wishbone boom) might seem rather complicated and involved. But once tried, even a novice finds it more simple to handle than the old gaff rig, or even the Marconi rig with a track boom. It is decidedly faster and permits the boat to point considerably higher.

A new 13-footer with triangular, or three-piece boom. It has proved very efficient for rigs with single sail where the spreaders will not interfere with the headsail



To make the plan completely up to date, a streamlined spar has been built which pivots with the sail. This, of course, is for use only on the smaller craft. The mast is grooved on the after side to take the luff of the sail, thus eliminating an external sail track.

In fairness to the others who have been experimenting along similar lines, it should be stated that we, at Bristol, do not claim exclusive credit for all of this development. We know of at least three other designers who have worked along these lines, and one has equipped a boat with the rig. Undoubtedly, a great deal of the success enjoyed by Vadim Makaroff's ketch *Vamarie* is attributable to her wishbone

(*Continued on page 114*)

Streamlining

The Resistance of Deckhouses and Other Above Water Structures May Be Reduced by Application of the Principles of Streamlining

By R. S. PINEGROVE, M.E.

ANY change or development in one industry is bound to have an influence on other lines of manufacturing. The development of the gasoline engine and alloy steels not only made the automobile a success but hastened the progress of aviation because materials and motive power were at hand. And aviation, not to be outdone in generosity, presents the automobile and marine industries her gift, streamlining.

What man is seeking, Nature has already achieved by evolution. Man wants speed with the least effort; Nature provided the birds, fish and insects with streamlining for the speed necessary to save themselves from enemies, or to enact the rôle of destroyer.

Although many of us are ardent fishermen, probably few have thought of the reason why fish have certain shapes and outlines. They vary in shape from the elongated eel, with its almost round midship section, to the squat, tear-drop streamlining of the sunfish and the flounder, that curious denizen of the sea. Nevertheless, Nature did her work methodically; though the various species of fish may differ in sectional or longitudinal contour, it is quite evident that all varieties, from the smallest sprat, or minnow, to the larger species, such as the shark, tuna or swordfish, are provided with streamlining according to their needs.

The birds, too, present differences in contour, varying from the squat sparrow and pigeon to the more graceful form of the blackbird and eagle. That the tear-drop streamlining is not a hindrance to speed and stamina is proved by the rapid and sustained flight of the carrier pigeon.

Enough power can be installed in land vehicles to propel them at desired speeds regardless of wind resistance. The airplane must go through the air with the least possible resistance; otherwise, there will not be enough margin for the carrying of passengers, mail and fuel.

Little or nothing was known of the theory of streamlining before the wind tunnel explained many of the mysteries of air flow and its behavior around objects of various shapes. Some of the earlier authorities thought that wind resistance varied directly with speed; others thought that the resistance varied as the square of the speed. Experiments made in Germany on a high speed electric railway, at speeds up to 130 miles per hour, proved that wind resistance varies as the square of the speed and that the kinetic energy theory is correct.

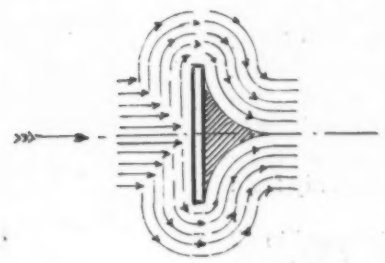


Fig. 1

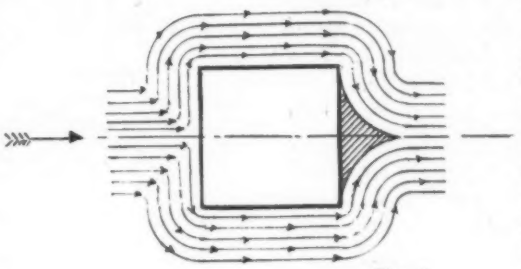


Fig. 2

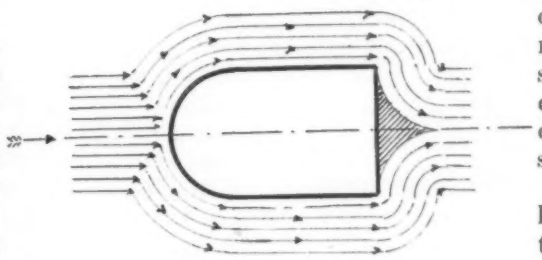


Fig. 3

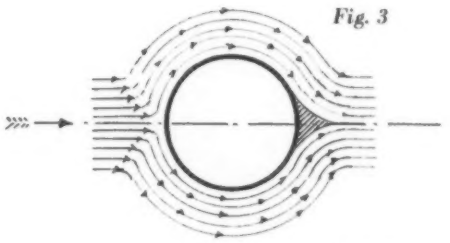


Fig. 4

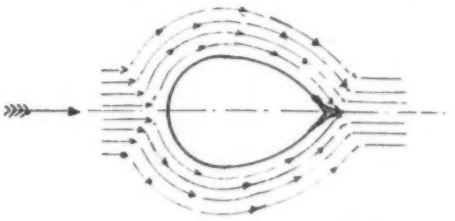
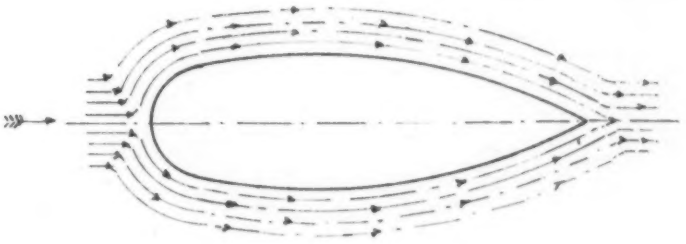


Fig. 5



Right
Fig. 6

Flat surfaces exposed to the wind cause most drag and resistance; sharp corners have a sort of wire-drawing effect on the air at high speed, the flat plate (Fig. 1), offering the greatest resistance. In addition, there is a drag on the trailing side (indicated by the shaded area) caused by the suction where the air streams fail to merge. The rounded leading edge of the trunk cabin (Fig. 3) reduces resistance materially, but here again we have the square, flat trailing edge, which practically neutralizes the advantage. The circular section (Fig. 4) also creates suction on the trailing edge.

The tear-drop form (Fig. 5) offers least resistance where the ratio between width and length becomes a minimum. Better effects are produced when the ratio can be extended, as in Fig. 6.

Air varies in density throughout the earth's surface. Hence, the dry air of the desert offers less resistance than the moisture-laden air of the seaboard. The maximum adverse condition is reached during a rain storm accompanied by a high wind.

Air, being an elastic fluid of sensible weight (0.080728 lb. per cubic foot at a barometric pressure of 29.92 inches of mercury and 32° F.) acquires kinetic energy when set in motion. As this energy varies with the square of the velocity of the wind, it will be appreciated that any increase in weight, due to humidity, will increase its resistance to any object moving against it. Hence, the wind-pressure curve

(Fig. 7) is approximate for the weight of air and barometric pressure stated above.

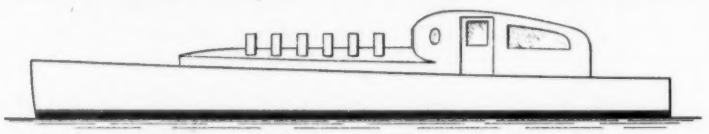
Wind resistance had its influence on sailing ship evolution. The early caravels had extremely high poops which served no useful purpose save to afford quarters for the captain and officers. The wind resistance of these high structures was great, and the ships acquired a topheaviness which made them dangerous in heavy weather. Hard ships to handle, the sailing efficiency of the type was extremely low, and the high poop was of benefit only in a following wind.

Gradually, ship designers took cognizance of these facts, and succeeding centuries brought about changes in design. Poop decks were lowered to within a few feet of the main deck; masts became more lofty, and the center of gravity was lowered. The clipper ship had reached a high state of development when steam began crowding the sailing ship from the seven seas.

Although there has been a marked increase in speed in all types of ocean power-driven vessels during the last thirty years, the greatest advance has been in the Atlantic express liners. The *Europa* and the *Bremen* were the first examples of the new era of streamlining; that its application in express liner design is sound, is proved by their performance.

The old *Mauretania*, speed queen for more than two decades, antedates this new era. With about 4,000 square feet of square-ended superstructure exposed to wind resistance, the power required to overcome the wind resistance created when driving this area at 25.5 knots through still air is 865 hp., or 1.27 per cent of the total shaft horse power of the ship's turbines.

But suppose the *Mauretania* has to buck a 30-mile blow. Now the combined force of the wind and that caused by the



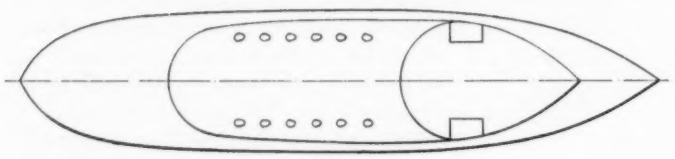
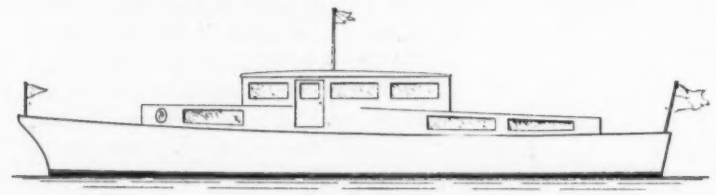


Fig. 8

ship's velocity becomes approximately 60 miles per hour. The power required to overcome this resistance amounts to 3,500 hp., or 5 per cent of the total s. hp.

No matter how well an object may be streamlined, it still takes power to drive it through an elastic fluid of sensible weight. The efficiency of the streamlining of the *Europa* and the *Bremen* is more or less problematical; it may be 50 per cent, or it may even be 75 per cent. Conservatively taking the former figure, the resistance of still air to the motion of



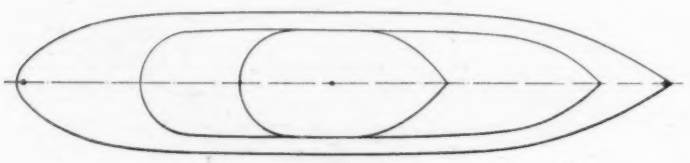


Fig. 9

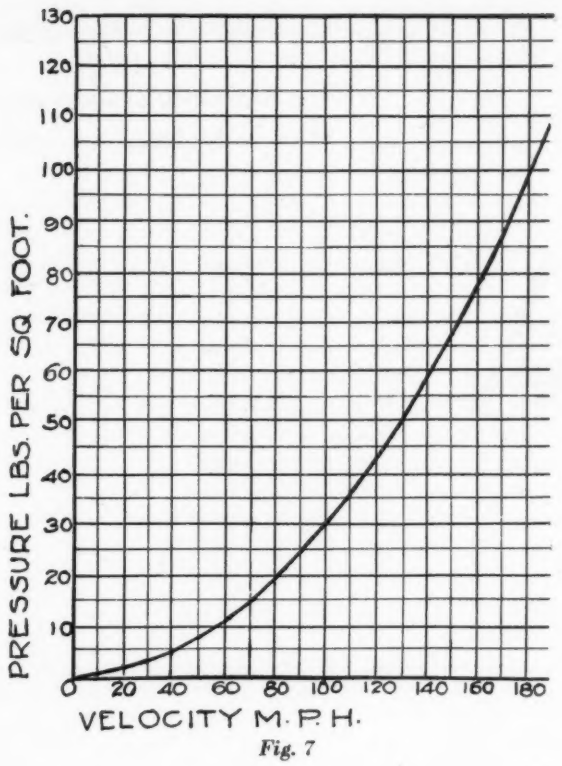


Fig. 7

these ships needs but 575 hp. to overcome it at a speed of 33 statute miles per hour, or 0.43 per cent of the 132,000 shaft hp. Pushing against a 30-mile wind, the power required for wind resistance is 2,200 hp., or 1.67 per cent of the total. The *Europa* and her sister ship are better able to maintain schedule speed under conditions that would delay the *Mauretania*. The value of streamlining becomes more pronounced in heavy winds.

At 10 m.p.h., a cruiser presenting to the wind 50 square feet of surface at right angles to the midship line will require 0.4 hp. to overcome air resistance; at 13 m.p.h., the horse power required is 0.98; a speed of 16 m.p.h. needs 1.63 hp. and 5.75 hp. at 25 miles.

The need for streamlining cruisers of low speed is therefore non-existent, as the amount of power required to overcome wind resistance is negligible compared to the total developed by the engine. However, designers will probably incorporate a modicum of streamlining to give style to their product. At the same time, even a little streamlining will be of some benefit.

But the problem of the speed boat designer is different. Every added mile of speed counts, not only under racing conditions but to the generality of owners who want speed without excessive cost of operation. To meet this requirement, the present style of square stern must be abandoned and replaced by the pointed stern. Open cockpits are to be avoided at high speeds as they cause considerable drag, due to suction. Low, streamlined cabins must take the place of cockpits.

At 50 m.p.h., one horse power is required to overcome wind resistance for every square foot of unstreamlined area exposed to the wind at right angles. At 60 m.p.h. the horse power required is 1.72, and at 70 m.p.h., 2.76. Wind resistance becomes a formidable factor in the upper speed brackets.

How much faster *Miss America X* would have been had she been built on the lines shown in Fig. 8 can only be conjectured, but when we consider that it takes 15.6 hp. at 125 m.p.h. to overcome wind resistance on a single square foot of unstreamlined surface, it becomes apparent that a fair

(*Continued on page 117*)

All Set for Norway!

Fine Fleet of Cruisers in Readiness for Long Blue Water Passage

COME noon of June 8th, a fleet of seven, and perhaps eight, yachts will maneuver for a start from Brenton Reef Lightship, off Newport, and at the gun will stretch away to the eastward on the first Transatlantic race from a United States port to Norway, or any other northern European country. Bergen, Norway, 3050 nautical miles away by the shortest course, will be their destination, and from three to four weeks will probably elapse before the first of the fleet raises Marsteinen Light and crosses the finish line. It's a long course, and a difficult course, and by the time the seven boats finish their crews will know that they have sailed a race.

At this writing, still ten days before the entry list closes, the fleet will be made up of two schooners (possibly three if an anticipated entry comes across), two yawls, two ketches and one cutter — all thoroughly able, seagoing craft, and manned by some of the best ocean racing sailors of three countries. Here is the full list of entries as received to May 15th.

Yacht	*Owner*	*L.O.A.*	*Rig*	*Nationality*
Vamarie	V. S. Makaroff	71′ 9″	Staysail ketch	U. S.
Mistress	George E. Roosevelt	60′ 4″	Schooner	U. S.
Stormy Weather	P. LeBoutillier	54′	Yawl	U. S.
Hamrah	Robert R. Ames	54′	Ketch	U. S.
Vagabond	Roger Robinson, et al	50′	Schooner	U. S.
Stoertebeker	L. Schlimbach and North German Regatta Verein	49′ 6″	Yawl	German
Sandefjord	Erling Tambs	46′ 4″	Cutter	Norway

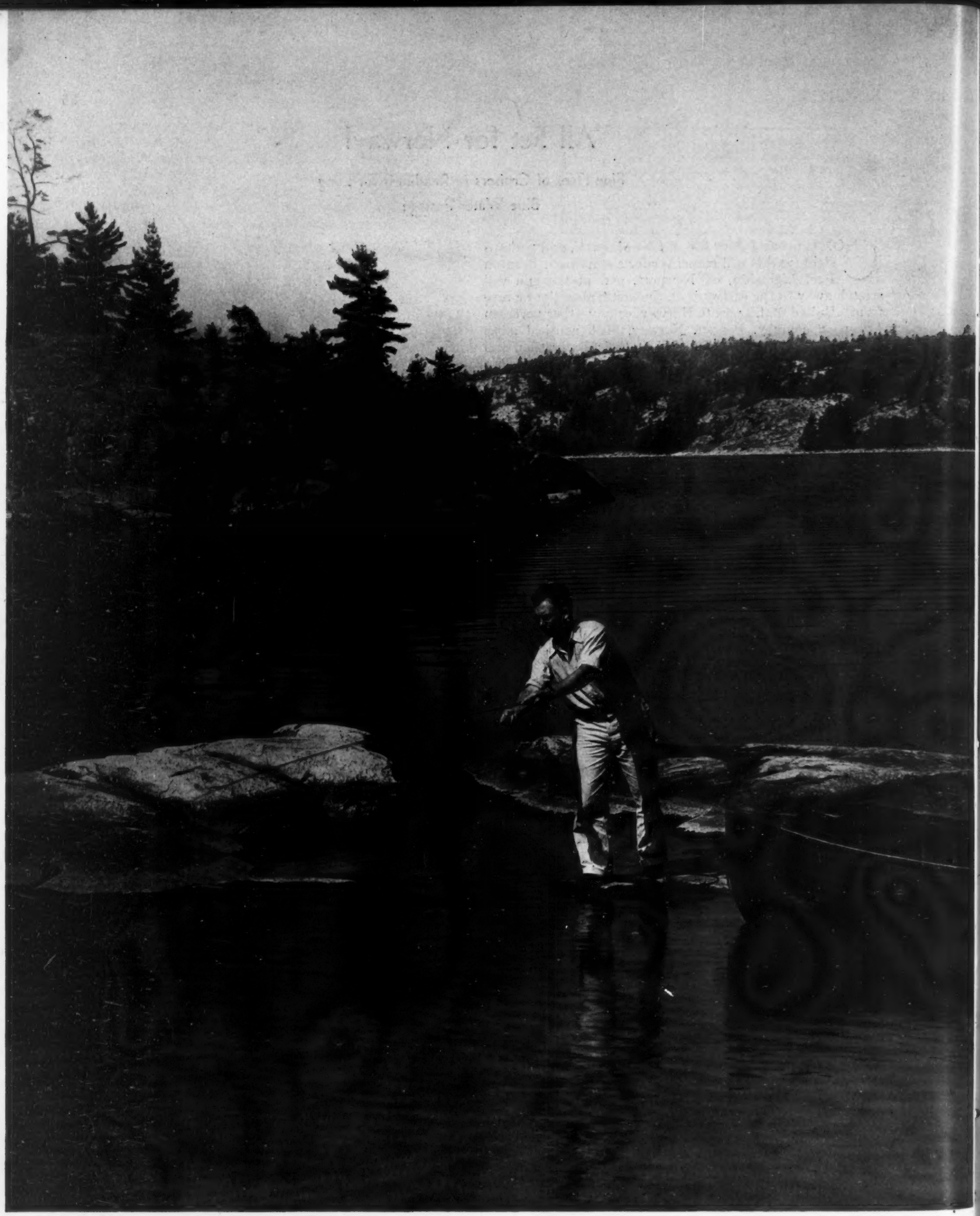
In addition to these, the schooner *Dauntless*, 61 feet, owned by George A. Whiting of Baltimore, is being prepared for the race and is a possible starter.

(*Continued on page 125*)

"Vamarie," Vadim S. Makaroff's "main trysail ketch," has done well in ocean racing. She was designed by Cox & Stevens

"Mistress," George E. Roosevelt's Gielow-designed schooner (below), is usually on hand when offshore racing is going on

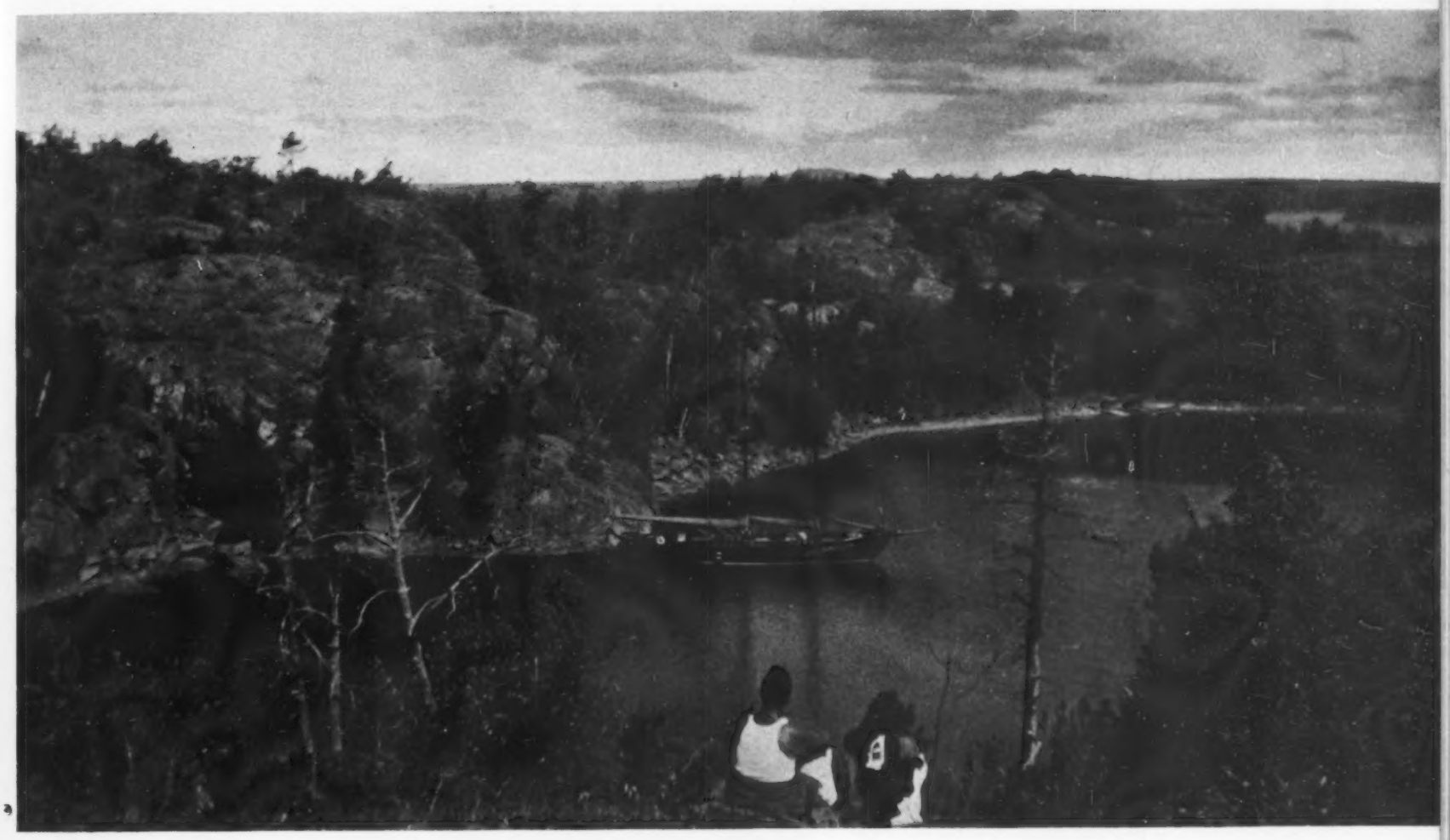
"Stormy Weather," Philip LeBoutillier's yawl, made her début in the 1934 Bermuda Race. She was designed by Sparkman & Stephens, Inc.



Near Killarney, Georgian Bay. The rocky shoreline offers the best of fishing for those who like to go after the elusive bass

From a photograph by John Kabel

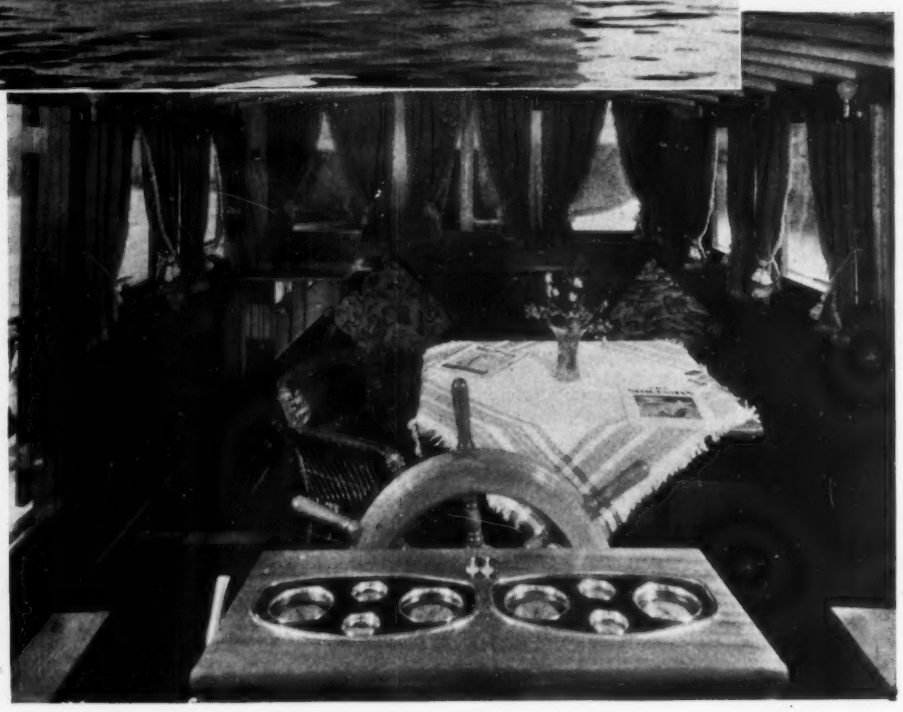
Georgian Bay—An Ideal Cruising Ground



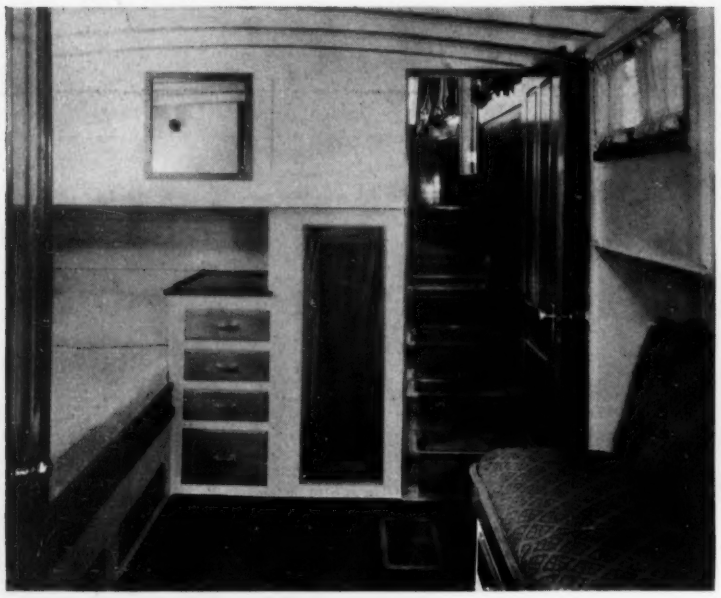
The schooner "Bagheera," of Chicago, moored in a snug cove near Little Detroit Passage, a spot seldom visited by yachts

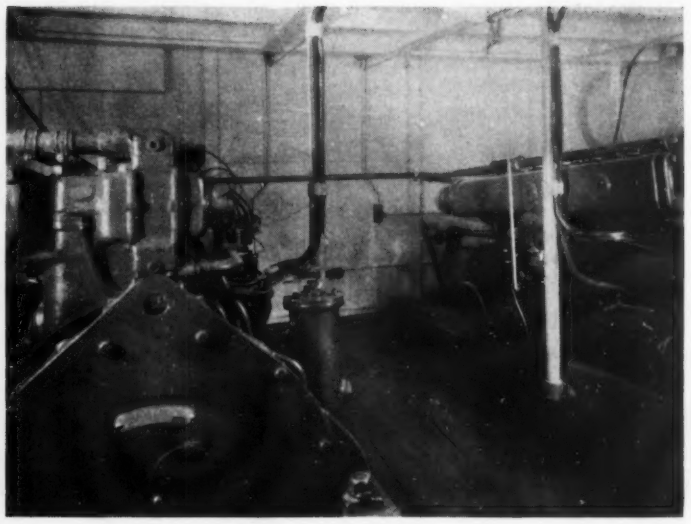
A Georgian Bay harbor, where no sign of habitation mars the shoreline. Right. The depth of water is such that yachts are often moored so that one may step ashore without using the dinghy

The "Vinyard 40"



This new cruiser, designed and built by the Vinyard Ship Building Company of Milford, Delaware, is 40 feet over all, 11 feet 6 inches beam, and 3 feet draft. The boat is seen above and at the right is a view of the deckhouse. Below is the after cabin, looking forward. A bathroom adjoins this. The galley is forward of the deckhouse and next to it is a cabin with two berths and a toilet room





The power plant, installed in a roomy compartment amidships, is a pair of Buda KM 393 Diesel engines which drive the boat 16 m.p.h.

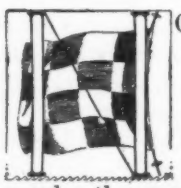
Bermuda News Bureau

Start of a team race between the Long Island Sound Interclubs and Bermuda One-Designs. In this case the Interclub skippers all tried for the windward end of the line and left the Bermuda boats free. As a rule, this is not good practice

Team Racing

Tactics That Help the Team to Win

By SAMUEL WETHERILL



NOW and again you will hear something about "team racing," just as you hear about "team play" in other sports. Perhaps it's a team race between Six-Metres for the British-American Trophy, off Oyster Bay, or perhaps on the Solent, or the Clyde. Or maybe the scene is Bermuda, with the Sound Interclubs giving battle to the Bermuda One-Designs, or the Frostbite dinghies taking a fall out of the Bermuda dinghies. Again, it may be the ubiquitous Stars, having it out with four-boat teams in Havana or Bermuda, or the Victories, Atlantics, Interclubs or Class S boats having a crack at the team racing game.

Well, with all this team racing going on, there must be something to it. What is the lure? What is it all about?

Team racing simply means that a team of four boats — or three, or five — engage in a contest against another team of equal number. The team scoring the greatest number of points is the winner. You are out to help *your team* win, and not to amass any personal glory or silverware.

In baseball, the batter cracks out a sacrifice hit. The batter is out at first, but his team mate, on third, scores the winning run. Get the idea? The batter has not tried to make a safe hit — he has hit with the idea of scoring his team mate — so *his team* could win.

Same thing in football. An inconspicuous guard, toiling unseen in the line, finally succeeds in opening a hole in the opponent's line — and the fullback goes boring through that hole for a touchdown. Hardly a handful of fans in the stands give the guard any credit — the fullback gets most of the glory. But *his team* wins, and the guard smiles happily to himself — he knows he has "done his bit" towards winning the game for his team.

Now, if the team racing seed has taken root and is ready to sprout, let's see what some of the moves of the game are. Of course, you can't lay down a specific set of rules for any team race. Yet there are a number of principles which will come in handy.

1. If the starting line is a fair one, with no particular advantage to be gained by starting at any given point, have one of your team start at one end, a second at the opposite end, and your two remaining boats — your best starting skippers — "free lance," or pick the best opening they can find. In this way you are pretty sure to have all your opponents covered, and be in position to take advantage of any "breaks."

2. When your team is in a commanding position, play safe. Keep your opponents covered — don't try any funny stuff — you're ahead, all you have to do is stay there.

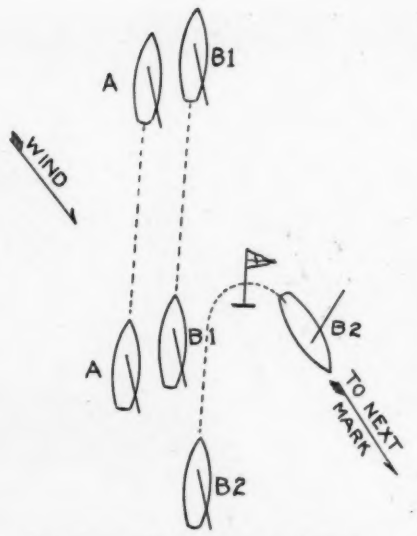
3. When your team is lagging behind, take any reasonable chance. Split tacks with the other team — if they'll let you. Go wind hunting, or tide hunting.

4. Never let a member of an opposing team go off by himself. The nearest boat on your team should cover him.

If not, the rascal may get a favorable slant, or current, and jump up several places. If one of your team goes with him, he'll get the same slant or current. If both hit a flat spot, both will suffer, and your team will be no worse off than it was before.

5. If any member of your team is "in bad," he should split tacks by all means — go fluke-hunting — provided the opposing team will let him. If they do, they are breaking Rule 4.

6. If you get in such a position that you can "sail an opponent beyond the mark," and let one of your team mates through, by all means do it. It is not only permissible, it is smart team work — you are gaining points for your team.



B–1, Bermudian, sailing A, American, beyond windward mark. B–2, Bermudian, jumps ahead of both

7. Beware of any definite, prearranged scheme of covering or sailing the race. Stick to the general rules, and let your tactics be governed by situations as they develop.

8. Suppose you and a team mate are first and second at the leeward mark, with an opponent in third place, and the next leg is to windward. You should take one tack, and your team mate the other. Your team will then have Mr. Opponent covered no matter what he does.

Now let's take some actual occurrences in team racing, and see where good tactics paid dividends, and where poor tactics showed a net loss.

A couple of years ago, on Long Island Sound, the Sound Interclubs were engaged in one of their usual close contests with the Bermuda One-Designs. There was a strong breeze — Interclub weather. Shortly after the start, each Interclub "hopped" a boat on the opposing team — never let that particular boat get away. The contest really developed into four two-boat races. No, the Interclubs didn't finish one, two, three, four — they didn't make any effort to. But each Interclub finished ahead of her chosen opponent, and the race was in the bag for the Americans.

Down in Bermuda, last April, four Frostbite dinghies were having a ding-dong battle with four Bermuda one-design dinghies. In the moderate breeze that day, it was a regular "dog fight," with little to choose between the two teams. Sailing a twice-over windward and leeward course, one of the American dinks, in third place and going strong, split tacks with the fleet — went wind-hunting. The Bermudians, knowing their local waters well, let her go. At the weather mark this particular American dinghy had dropped to seventh place. That was poor head work on the part of that American boat. Incidentally, the Bermudians broke team racing rules, too. Their act, however, was justified in the final analysis — their knowledge of local conditions made it a good gamble to break one of the rules of the game.

Several years ago, up on Narragansett Bay, five Sound Interclubs were having it out with a team of five Triangles. One of the Interclubs got away to a bad start — two Triangles hemmed her in and shoved her back in the ruck. But that Interclub skipper was a veteran of Narragansett Bay — had raced there for twenty years or so before emigrating to the Sound. He knew the tides — and tidal currents can be vital factors in racing in that locality. He saw a chance to benefit by taking a long tack away from the fleet into a back eddy. He took it — and nary an opponent covered him. He was first boat at the weather mark — and first boat to finish. Look back at Rules 3 and 4 — see how both of them worked out in this particular instance. One for one team, one for another.

In another of those Interclub-Bermuda contests, also held on the Sound, two American boats rounded the mark a few lengths apart, followed closely by a Bermudian. The Bermudian was distinctly faster on the leeward run to the finish. She soon passed the nearest American, and it looked as though she would pass the next one into the bargain. But she never reached her — for the Interclub which she had passed promptly camped on her wind. The Bermudian started a series of fierce luffing matches — but try as she would, she couldn't get out from under that blanket, and was completely thwarted from attacking the leading American. "Always help out a team mate when you see a chance."

Once again the Interclubs are battling the Bermudians, this time in Hamilton Harbor. A reefing breeze — wet, cold, with the boats staggering. At the weather mark, an American and a Bermudian were close together, on the port tack, mark to be rounded to starboard. The Bermudian was inside boat, with the American overlapping her to windward. Did that Bermudian go smack around that mark? She did not. She sailed that American boat right by the mark, six or eight boat lengths — while another Bermudian, just behind, came up fast, swung off and around the mark, and went roaring away on the leeward run with her wind clear. Excellent team work on the part of the Bermudians — and there was nothing the American boat could do to thwart it. Look back at Rule 6. Get it?

I hope you are beginning to get the idea of team racing. It really is a great game — quite different from ordinary fleet racing, or even match racing. Nation against nation — class against class — club *versus* club — one locality against another locality — team play against team play, and not a lone skipper trying to annex individual glory. Try it out, wherever you may race. It's a whale of a lot of fun.

"Mahdee" stepping along in a breeze with a reef tucked in her mainsail

What About That Electric Drive?

By

ALEX W. MOFFAT

MAHDEE was described in YACHTING for February, 1932. To quote from that article: "Departing from orthodoxy in layout, rig and power plant, she has attracted a great deal of attention." So many people have asked about the success of the electric drive as applied to this 19-ton schooner that I shall attempt to describe the performance of the power plant in the light of four seasons' experience with it.

Mahdee is 53′ 2¾″ over all, 46′ water line, 15′ beam and 6′ draft. She was designed by S. S. Crocker, Jr., and built in 1931 by G. F. Lawson of Boston. The power plant was engineered by the General Electric Company. It consists of two 10 kw. 110 volt G. E. generators direct-connected to two 6-cylinder Winton gasoline engines 3″ bore, 4″ stroke governed to 1300 r.p.m. These generators furnish current for a 220 volt G. E. motor (direct-connected to the propeller shaft) which develops 25 brake horse power at 550 r.p.m. turning a 28″ by 18″ wheel. Two wheels have been tried, one a two-bladed Thompson feathering, which drives *Mahdee* 7.6 knots, and a three-bladed Hyde of the same diameter and pitch which drives her a strong 8 knots. The gasoline consumption has proved to be the same with either wheel, 4½ gallons per hour using both generators together.

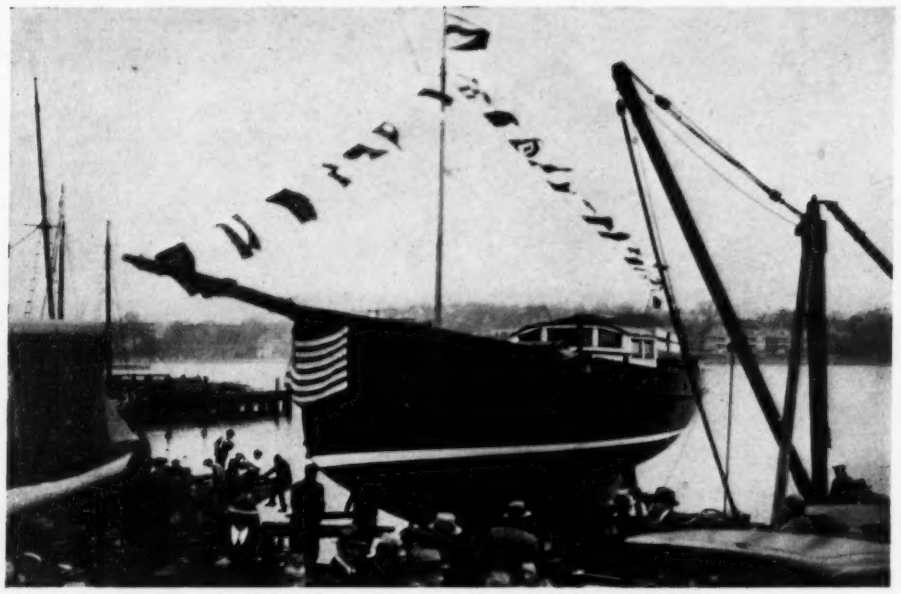
When one generator only is in operation, delivering 110 volts to the 220 volt motor, the latter turns 300 r.p.m. and drives the boat at a speed of 5.5 knots. Three sources of 110 volt current are provided: (a) No. 1 generator, (b) No. 2 generator and (c) 56 cells of Exide batteries. For practical purposes, the speed under batteries alone is about 3 knots, as the current draw is too heavy at the top step of the controller. An ampere hour meter tells at a glance how much juice is left in the batteries at all times.

When both generators are running simultaneously, the batteries float on one generator line or the other, like an automobile starting battery, depending on which side the battery switch is thrown. The switchboard is so arranged that it is impossible to throw 220 volts on the 110 volt battery or lighting lines.

In starting the engines the battery current is thrown into the generators, making starting motors of them, and the switches are then thrown to running position, when they take up their functions as generators.

This sounds complicated, but the switchboard is a masterpiece of simplicity. Anyone who can read the plates on the switchboard has only himself to blame if he goes wrong.

The generators run at constant speed whether light or loaded. The speed of the propulsion motor is controlled by a



"Mahdee" just before she was launched. She is a husky looking craft

waterproof street car type controller, located beside the steering wheel. It has five steps ahead and five steps astern. Surplus current, when running on the lower steps, is taken care of through resistance grids. The lower steps are seldom used.

So much for the technical workings of the outfit. The two questions most commonly asked are: "Is electric drive satisfactory?" and "Would you use electric drive again?" The answer to both questions is, emphatically, "Yes."

In four long seasons of offshore cruising I have never had one moment's delay due to the method of drive, or any interruption of electrical service. The first season we ran into two difficulties which were traceable to faulty details in installation, the results of which were unforeseen and in no way attributable to the makers of the equipment.

The generator room is a separate compartment just abaft the foremast. This put the water intake of the engines so far forward that when plunging in a heavy sea *Mahdee* lifted them out of water, causing the circulating pumps to suck air and lose their priming. We then located the intake hull fittings, with strainers, under the companionway steps and led pipes forward within the hull. After that we had no further trouble.

Both engines exhaust into the same exhaust tank, a vertical affair with a sea connection at the bottom. The two wet exhaust streams enter this tank from the top. No matter how much water is poured in from the circulating system, the level in the tank is necessarily always the level of the water line, water seeking its own level. The exhaust gases pass out through a dry pipe at the top above the deck, thence into the copper tube around which the hollow foremast is built, and so out at the masthead. Incidentally, a plume of steam from the masthead is instant warning that the engines are not getting enough water.

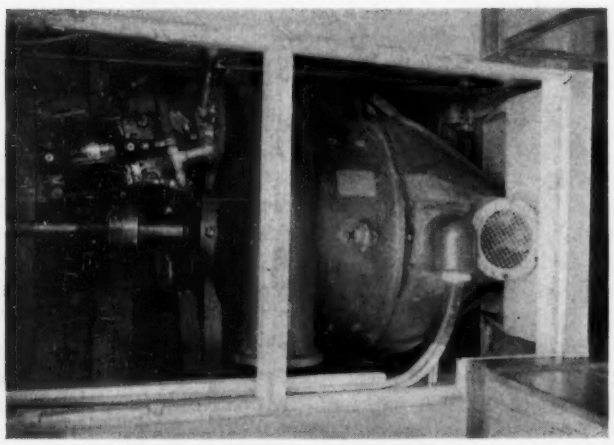
The trouble which developed here was due to our frequent use of one generator set running alone. An epidemic of sticky valves developed. It was then discovered that vapor from the tank worked back through the idle exhaust line. As soon as a valve was installed in each exhaust line, so that the idle line could be shut off, no more trouble was experienced.

Another disadvantage developed which so far has not been overcome. In reversing a feathering wheel driven by an internal combustion engine, it is often necessary to speed up the engine and throw the gear into reverse suddenly in order to snap the blades into reverse position. This is not possible with an electric motor drive because the power must be applied one step at a time. The only way to be sure of the reversing action of the feathering propeller on *Mahdee* is to lose all forward headway before putting the controller to astern. With the solid wheel, of course, no difficulty is experienced. Then the 100 per cent reverse power, regardless of headway, makes her handle like a tug. The solid wheel spins when under way, however, and is a noticeable hindrance in windward work under sail alone. The feathering wheel is preferable for this reason and is safe enough if its limitations are taken into consideration in docking.

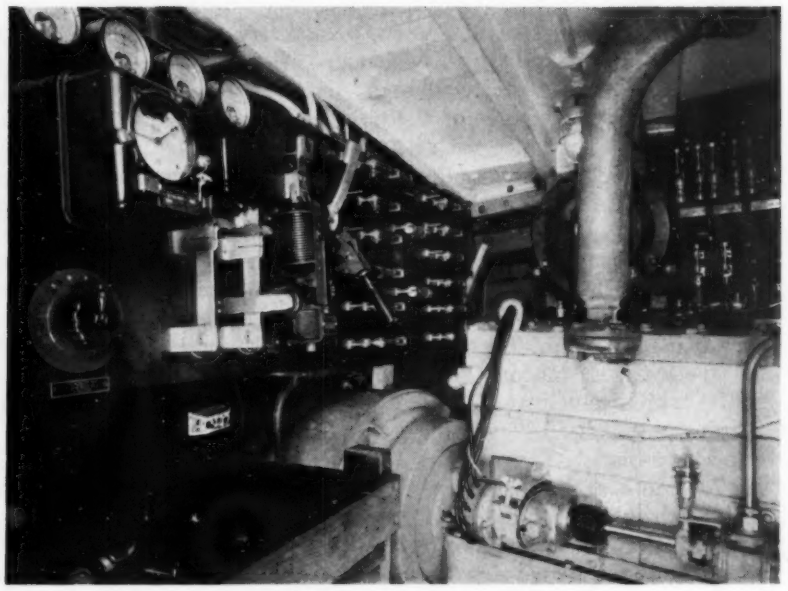
I do not consider that electric drive is particularly applicable as a replacement for existing auxiliary power. One of its great advantages lies in the interior layout which it makes possible.

The electric motor in *Mahdee* is located as far aft as possible, under the floor of the sunken deckhouse. It is noiseless, free from vibration, completely waterproof, and has to be

(*Continued on page 118*)



The G. E. propelling motor is tucked away under the floor of the deckhouse



Right. One of the Winton 10 kw. generating sets, located forward, and the switchboard

Who Was Right?

"The Florida Case," An Interpretation Bearing on the Overtaking Rule

By GEORGE E. HILLS

Author, "The Sailing Rules in Yacht Racing"

ABOUT a year ago a friend in Florida wrote me in regard to a protest which involved the principles to be discussed in the following article. In the actual case *A* and *B* (see sketch), small, centerboard sloops, came abreast of Mark 2 nearly side by side, about a boat length apart. *A* ranked as overtaking yacht. A 20-mile breeze was blowing. Both yachts simultaneously altered course and jibed around the mark, *A's* stem being slightly abaft that of *B*. *A* was held true for Mark 3, but *B* temporarily got out of control and, as an integral part of the jibe, luffed very sharply, her stem striking *A* forward of the latter's main shrouds.

B protested *A* for violation of Rule 30 (A) and (B). *A* protested *B* for violation of Clause (K) of the same rule, claiming that it was impossible to respond to *B's* sudden and unexpected luff. The judges sustained *B's* protest and dismissed *A's* complaint. Unfortunately for the good of the sport, no appeal was taken either directly to the Executive Committee of the N.A.Y.R.U. or otherwise.

I use the words "unfortunately" and "directly" advisedly, first, because this situation has not been passed upon in any English or American protest appeal case; second, because it involves one of the few important sailing rule problems which remain undecided. It would seem, then, to be for the best interest of the sport to appeal directly to the court of last resort rather than to the Appeal Board of the local Y.R.A. If an appeal involving debatable interpretation of a racing rule is taken directly to the Union — and this may be done with the written consent of the local Y.R.A. — the decision will be published in a Union bulletin and sent to every affiliated Y.R.A., yacht club and individual member. If, on the other hand, an appeal is taken to the Appeal Board of the local Y.R.A., and the latter's decision upholds that of the Race Committee, there can be no further appeal to the Union (Rule 49 [1]). It may follow, therefore, that knowledge of such decision will be restricted to the members of the local Y.R.A. Furthermore, there is the possibility that the same question may come before the Appeal Board of another racing association and an opposite decision reached, thereby creating a conflict of authority which would be unfortunate.

The basic principles involved in this case of *Doris* vs. *Seagull* were of such outstanding interest that I have elaborated the facts somewhat, and under the title of "The Florida Case" have discussed the problem with experts on the sailing rules in England and America.

The Situation

In a fleet of yachts *B* rounds Mark 1 closely followed by *A*, *C*, *D*, etc. After rounding Mark 1, *B* ranks as overtaken yacht, the three requisites to constitute such condition having been fulfilled. On the broad reach under spinnakers to Mark 2, *A* gradually overhauls *B* and establishes an overlap to leeward. Both yachts jibe around Mark 2 simultaneously, *B* still being slightly ahead as they square away on the reach to Mark 3 at the windward end of the finish line. *A* commences to gain. *B* luffs gradually at first, but later luffs sharply. *A* responds until both yachts are well to windward of the straight line between Marks 2 and 3. Fearing that further luffing will permit *C* and *D* to finish ahead *A* refuses to luff further and the yachts touch, *B's* stem still being forward of *A's* main shrouds. After the yachts contact, they bear away for the finish line, the order of finish being *C*, *A*, *B*, *D*, etc.

A protests *B* for violation of Rule 29, Definitions (7) Proper Course, and Rule 30 (C), in that by luffing to windward of the line between Marks 2 and 3, *B* technically "bore away" out of her proper course for Mark 3 to hinder *A* passing to leeward.

B protests *A* for violation of (1) Rule 30 (A) and (B), in that *A*, being overtaking yacht to windward, did not keep clear; (2) Rule 30 (G) in the event that at the time of contact the two yachts no longer ranked under the Overtaking Rule, and (3) "the ordinary customs of the sea" as provided in Rule I, for permitting the yachts to collide.

Arguments

A contends:

1. That when she established an overlap to leeward the yachts were then governed by Rule 30 (A) and (C) as modified by Rule 29 (7) Proper Course.

2. The clause of Rule 30 which then became applicable continued in force until overtaking terminated.

3. Overtaking-to-leeward conditions continued up to the time of contact.

4. After the yachts jibed around Mark 2, Mark 3 became "the next mark" within the meaning of Rules 29 (7) and 30 (C), and that there was, therefore, a proper course between Marks 2 and 3.

5. Although *B* had the right gradually to luff *A* to the straight line between Marks 2 and 3, she (*A*) was entitled to complete freedom from interference to windward of such line.

6. After jibing around Mark 2, it would be unfair to compel her deliberately to slacken speed, fall astern of *B* and endeavor to pass on *B's* then leeward (starboard) side.

7. Rule 30 (B) is not applicable because when she established her overlap *A* did not "attack," and, therefore, had a right to unmolested, free passage subject to Rules 29 (7) and 30 (C).

8. At position 1, *B* should have foreseen the situation which might result when Mark 2 was rounded if *A* was permitted to establish her overlap to leeward at Position A^2, B^2, and should have made an effort to prevent such overlap.

9. Having neglected or failed to defend at the proper time and place against an attack on the third leg of the course, *B* has no right to expect the rules to operate to restore to her what she lost by her own fault.

10. If, after rounding Mark 2, the situation is one not expressly covered by the Yacht Racing Rules, the following sections of the *U. S. Pilot Rules for Inland Waters* are applicable:

> Article 17 (d): When both are running free, with the wind on the same side, the vessel which is to the windward shall keep out of the way of the vessel which is to the leeward.
>
> Article 21: Where, by any of these rules, one of the two

vessels is to keep out of the way, the other shall keep her course and speed.

It followed, therefore, that if the foregoing parts of the U. S. Pilot Rules were applicable, *B* had no right to change her course by further luffing after Mark 2 was rounded and the yachts had squared away for Mark 3.

B contends:

1. The purpose of the last sentence of Rule 30 (C) — "The lee side shall be considered that on which the leading yacht of the two carries her main boom at the time she ceases to be clear ahead" — is twofold:

a. To provide a means of determining which side is the official windward or leeward side when two yachts are sailing with the wind practically dead astern and with booms on opposite sides.

b. To prevent the leading yacht, after an overlap has been established on her leeward side, from jibing merely to luff the overtaking yacht and force her wide of the course to the next mark.

2. Rule 30 (C) does not specify when it shall cease to apply and common sense requires that it should no longer be applicable when conditions change and there is no further need to resort to the rule in order to determine which is the windward or leeward side.

3. After rounding Mark 2 both yachts were sailing a new and entirely different course, with new wind conditions that clearly indicated which was the windward yacht.

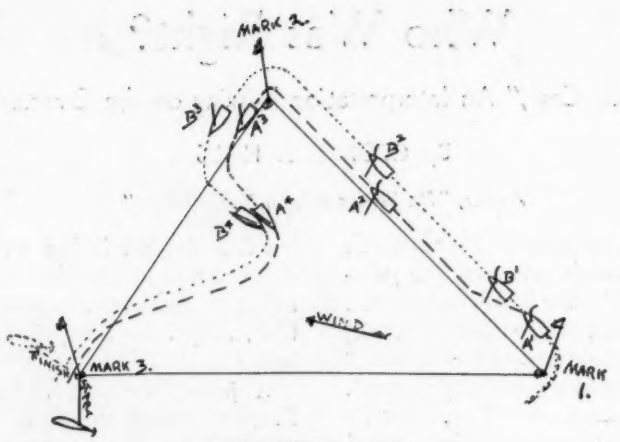
4. The act of simultaneously jibing around Mark 2 involved a substantial alteration of course by both yachts, and terminated the former status of overtaking.

5. If rounding Mark 2 and commencing a new leg of the course did not terminate overtaking, *A*, by jibing, deliberately and on her own initiative, voluntarily surrendered the freedom from hindrance to which she theretofore had been entitled, and, when *B* jibed also, became the overtaking yacht to windward in law as well as in fact, and that Rule 30 (A) and (B) governed the case thereafter.

6. If, after rounding Mark 2, neither Clause (B) nor Clause (C) of Rule 30 was applicable, Clause (G) governed the situation for the reason that when both yachts jibed around the mark the governing principle then became the position of the yachts with reference to the direction of the wind, and the situation became analogous to the change of windward and leeward status when two yachts ranking under Rule 30 (A) and (B) not only luff head to wind but accidentally fall away on the opposite tack, thereby terminating overtaking and causing Rule 30 (G) or (H) to become applicable.

7. The jibe around Mark 2 involved a substantial change of course equivalent to that of a tack, and Rules 29 (7) and 30 (C) are limited to situations where overtaking continues after a jibe by one or both of the yachts but no substantial alteration of course follows.

8. The English case of *Su Su* vs. *Endrick*, Y.R.A., 1908, is not in point because in that case only the overtaken-to-leeward yacht jibed, whereas in the instant case both yachts jibed simultaneously.



"The Florida Case"

Course triangular; all marks to be left to port. First leg a beat to windward; second leg a very broad reach on the starboard tack; third leg a reach on the port tack. No tide. Wind steady and true. Any proper course between Marks 1 and 2 and 2 and 3 is a straight line from mark to mark

Discussion

The Yacht Racing Rules must be interpreted as written, and not as one might wish they were worded. Only if what would appear to be a correct interpretation of the rules as worded brings about a result clearly contrary to the principle of fair sailing implied by Rule I are we justified in coming to a different conclusion.

There seem to be three somewhat divergent opinions, or viewpoints, as to which clause of Rule 30 governed after the yachts jibed around Mark 2, *viz.*:

1. Overtaking-to-leeward continued, and the yachts still were governed by Rules 29 (7) and 30 (A) and (C).

2. Overtaking continued but an entirely new situation arose, and Rule 30 (A) and (B) governed.

3. An entirely new situation arose, overtaking terminated, and Rule 30 (G) came into effect.

Let us discuss these in the order enumerated.

I. Rules 29 (7), and 30 (A) and (C) Continued to Govern

Rule 29 (6) — Overtaking — specifies with utmost clarity four acts or conditions, the doing or fulfilment of any one of which terminates existing overtaking conditions. There is no intimation by implication, or otherwise, that the act of rounding a mark without tacking terminates an existing overtaking status. In fact, the American footnote to Rule 29 (6) 4 — there is no such footnote in the corresponding British rule — specifically states that "A jibe is not a tack within the meaning of this rule." The footnote adds nothing to the rule; it merely makes its meaning clear beyond a doubt. We must conclude, therefore, that the omission of a fifth act or condition terminating overtaking was deliberate and that the International Conference of 1929, intended to limit the acts or conditions which terminate overtaking to the four enumerated in the definition. To read into the rule a fifth act or condition would be judicial legislation which would be obviously improper.

When the yachts rounded Mark 1, they ranked under Rule 30 (A). When *A* established an overlap on *B's* leeward side the yachts ranked under Rule 30 (A) and (C). Overtaking conditions once having been established, they continued until one of the four acts or conditions enumerated in Rule 29 (6) should develop. Up to the time of contact, no one of these acts or conditions had occurred and, therefore, *A* still ranked as overtaking yacht.

Before *A* established an overlap to leeward, *B* had the right to jibe and luff, but after the overlap had been made, although *B* still had the right to jibe, she no longer had the right to luff (*Nyria* vs. *White Heather*, British Y.R.A., 1922, Case 6), because such luffing would constitute "bearing away" out of her proper course for Mark 2 in order to hinder *A* passing to leeward (*Su Su* vs. *Endrick*, British Y.R.A., 1908).

[These two cases would seem to refute and dispose of *A's* eighth and ninth contentions because at Position A^2, B^2 it would have been clearly illegal for *B* to bear away out of her proper course for Mark 2 to hinder *A* passing to leeward.]

(*Continued on page 120*)

Under the Lee of the Longboat

By "SPUN YARN"

IT WON'T be long now before the boys start on the long passage to Bergen. After the race is finished I'll tell you which competitor has the best chance to win. In the meantime *Stormy Weather* with Rod Stephens and a crew of young veterans aboard looks pretty dangerous, while of *Vamarie* it may be said that she will surprise a great many experts if she doesn't win. *Mistress* is always a serious contender, and I'm sorry I can't be along in another boat to follow her in, as usual.

Strictly Personal: There is a rumor in circulation to the effect that I am trying to do Skipper Stone out of his job as editor of YACHTING. The rumor is not factual. My great ambition when I return from England is to convert *Hotspur* into an outboard cruiser and explore the ports of call on Long Island Sound. Even when I've done that I won't be looking for the Skipper's job. We say "Skål" together.

Another thing I want to do is establish an island midway between Bermuda and Long Island. Adrian Iselin has won this season the principal Star boat trophies at Cuba, Nassau, and Bermuda, and it seems too bad there isn't another island world for his *Ace* to conquer.

There were the makings of a sensation in the news not long ago when it was reported that men were in danger in a motor boat off Eaton's Neck, Long Island, and that, thanks to the closing of the life-saving station at that point, there was nobody on hand to rescue them. In the emergency a surf boat was trucked from the south shore of Long Island, nearly forty miles by road, and launched near Eaton's in a northeasterly gale. Later despatches revealed that the motor boat had not foundered but had been towed to safety by a Coast Guard cutter from New York Harbor. The feeling remains, however, that the Government should not save pennies by abandoning life-saving stations. Not, at least, until the Administration gets around to abrogating the well-established law of storms. . . . P.S. I see Sandy Hook has been provided with a new motor lifeboat which cost 100,000 smackers. Maybe the patriots vote oftener in New Jersey.

Twelve years ago, when the Bermuda Race was revived, Cap Stan remarked on this page that there was almost enough long distance racing in prospect to satisfy even the most enthusiastic. He enumerated six races to prove his point. On the current calendar I find upward of twenty races for non-racing craft, exclusive of foreign events. Let's go cruising again.

One of the oldest of all the annual events on Long Island Sound (heave a brick if I'm wrong, Harry) is the New York Athletic Club's annual power cruiser race to Block Island. It is also one of the most vigorous, if the proposal for running this year's affair is any criterion. The race is scheduled to finish at 9 p.m. of July 6th. Each entrant determines his requisite starting time to finish at this hour. Control points are established along the way and every racer is timed by an observer on board as she passes these points. No timepieces may be consulted by owner or crew during the race, and the trick is to pass the control points and to finish according to prediction. The winner will be that boat which varies least from her owner's calculations. She will also be the boat whose owner knows tides, wind resistance, and motor performance better than his competitors know these factors. It's a slick idea, except that without clocks how will the boys know when it is noon?

That's an able, attractive craft of Slim Baker's, and I hope I may be pardoned on the score of local pride if I mention that *Ranger* was built at Huntington, L. I., by my favorite builder. The day I went aboard, the coal stove was doing pleasant things to the atmosphere in the cabin, and I hope you will forgive me again if I note that it was made by hand at Huntington by my favorite mechanic. Slim designed the stove himself, and it's compact enough to fit in any cabin that has more than three feet headroom.

A slick trick of the Lee Rail Vikings that I call to mind deserves attention if not exactly censure. They ran a three-cornered race last summer, and at the last minute the race committee sized up the wind conditions and reversed the

(Continued on page 118)

Here there is a second wave of the bow system a little abaft amidships. The dinghy is on the back of the first transverse crest of the following wave series

Why Doesn't She Go Faster?

It Takes Power to Overcome Skin Friction and Also to Make Waves

By CHARLES H. HALL

MORE than one motor boat owner seems to think that if he doubles the horse power of his engine he will automatically double the speed of his boat. So, too often, an engine that is about the right size for the boat is taken out and one of twice the power is installed, and the owner is bitterly disappointed at the results. Instead of going twice as fast, his boat sits on her tail and digs a hole for herself in the water and goes a mile or so faster. The bewildered boatman scratches his head and then bawls out the engine manufacturer or salesman.

In the first place, every motor boat should be designed for the speed she is to make if her power is to be used efficiently. She must be the right type for the speed or power will be wasted. There is no use building a boat that will not plane and trying to drive her at a speed that can be made only by a step hydroplane of her length. Nor is there any percentage in building a boat with a bottom suitable for a 30-miler and then putting in a little coffee mill that can drive her only twelve or thirteen miles. She'll be wet and uncomfortable and her small power will not be used efficiently.

First, if we except the planing type of hull and consider the average round bottom cruiser, length has a great influence on possible speed. Naval architects, in planning a power boat, consider the speed-length ratio — the speed in knots divided by the square root of the water line length in feet. A 100-footer traveling at ten knots is relatively as fast as a 49-footer making seven knots, the speed-length ratio being unity in both cases. Compared with motor yachts, especially those of the commuter type, the Atlantic express liners are slow if we consider the speed-length ratio. A 900-foot steamer at thirty knots has a speed-length ratio of unity while that of a 64-footer at the same speed is 3.75. A 60-foot rowing shell is easier for eight oarsmen to propel than is a 28-foot whaleboat. The shell, to be sure, is lighter than the whaler, which brings us to the matter of displacement.

Every floating body displaces water equal to its weight, so then when we say that a boat has fifteen tons displacement, we mean simply that that is her total weight with everything aboard, crew and all. Now displacement is a considerable factor in resistance, not only the actual displacement of the boat but the way it is distributed. A slow boat should have her displacement pretty well amidships, with full middle body and fairly fine ends, while, as the speed increases, more and more of the displacement should be strung out toward the ends. The naval architect's measure of this is the prismatic coefficient, which is a decimal expressing the relation of the actual hull with what it would be were the shape of the midship section carried out the entire length of the water line. A slow boat, with most of her displacement in the middle of her, should have a low prismatic, while a fast one, with fuller ends, needs a higher coefficient — of course, within fairly narrow limits.

Another definition which should be given now is wetted

surface, which is the area of all of the underwater part of the boat. This also has its effect on resistance.

Now the resistance of a boat to ahead motion is made up of frictional resistance, wave making and eddy making. With a well designed craft, with attention paid to fairing off the sternpost, struts and so on, we need not worry about eddy making.

Frictional resistance varies with the area of the wetted surface and its condition. It is caused by the friction of the water on the hull as the boat moves ahead and, naturally, is less if the bottom is clean and smooth than when it is rough and foul. Even a little fouling will nearly double the amount of this resistance, as every racing man should know. The total frictional resistance also varies with the length of the surface since the water acquires some forward motion, in relation to still water, as the boat moves through it. Frictional resistance is easy to calculate, given the area of the wetted surface and assuming a smooth bottom. Its amount increases directly with the speed. At low speeds or, rather, at low speed-length ratios, the frictional resistance is the major part of the total resistance. A clean bottom is a great factor in keeping this resistance as low as possible.

Unfortunately, there is no simple law governing a boat's resistance, and most of our information about it is derived from experiment, either on full sized vessels or by towing models in "tanks" and measuring the resistance and speed accurately. In analyzing the results of such tests, the frictional resistance is calculated and subtracted from the total resistance, the so called "residuary resistance" being mostly due to wave making. Now, you cannot push a body through water, or through any medium, without creating a disturbance. This disturbance extends quite a distance from the vessel causing it. Stand alongshore some time when a tug is going by fairly close inshore. Before she is abreast of you, the water has started to recede, draining out of all the little pools among the rocks or leaving the beach bare for a foot or two. As she passes, her bow wave comes rolling in, followed by the stern wave system. But the noticeable thing is that the water quite a distance from the boat is affected. Look at her as she goes by. She has pushed up a hill of water ahead of her, has a fine smother of foam under the bow, a hollow amidships, and another hill aft. A fine, steep wave is rolling off each bow and another wave aft, while a transverse set of waves follows in her wake. Or stand on a bridge and watch a boat going under it and notice the two complete wave systems, one forward and one aft, traveling along with her. It takes some power to pile up a set of waves like that, lifting tons of water and shoving it away from the boat.

It will, perhaps, be easier to visualize the boat as stationary and the water in motion. As the water approaches the boat, it is deflected to one side or another, sharply if near the hull and moderately if distant. A filament of water traveling along the hull will follow its shape closely, at the same time pushing away the water outboard of it so that the effect of the obstruction offered by the boat is felt for a considerable distance. As the water nears the boat and is deflected, its velocity is decreased and its pressure increased since the product of pressure and velocity is a constant. This increase of pressure is transmitted to the neighboring water and also to the bottom and to the surface. Consequently, the surface, being free to move against merely atmospheric pressure, is elevated into a wave.

As the filament of water gets around the bow and straightens out again, its velocity is increased and its pressure decreased, so that the surface is lowered and a hollow formed. With a long ship there will be several crests and hollows along the side. At the stern, velocity is again decreased and pressure increased — independently of the bow system — and the stern wave is formed. Both bow and stern waves are constantly diverging from the boat, their crests at an angle with her center line. Across the wake is the system of following waves, their crests at right angles with the course.

Bow and stern systems are independent of each other. As the waves of the bow system go aft, in a long ship, their height is less. At the stern, they meet the waves of the stern

(*Continued on page 116*)

The first crest of the bow wave system is seen forward, the second crest in the foreground. The first stern wave is at the transom. Most of the "rooster tail" astern is caused by the submerged part of the transom

Across the Bay to Vigo

By

GEOFFREY G. OWEN

THE Bay of Biscay has a notorious reputation in heavy weather. It was dreaded in the old days of sail and even to this day it is treated with respect by the most powerful of steamers. A capricious lady, an irritable lady of sudden changeable moods. One day pacific, the next tempestuous. I have sailed across it when the experience would have been sheer fun for a Frostbite dinghy, and I have chanced it when the same dinghy would have had a hard fight to keep from Davy Jones' locker before she had gone a mile. When in this latter mood there is no knowing what may happen.

In the 33-foot yawl *Uldra* we had sheltered in Falmouth for several days waiting impatiently for a sou'west gale to end its demoralizing effect on us. Bad weather *is* demoralizing when you're in harbor. The size of waves and the strength of wind grow daily more fearsome in imagination. You begin to lose trust in yourself and, worse still, in your ship. Our morale was extremely low, but we were blamed if we would intentionally set out into the teeth of a gale. We had met enough head winds at sea ever to consider leaving a snug haven for the trials of battling into another. Besides, we were setting forth on a long trek from Falmouth to the West Indies, and rooted well in our minds were thoughts of days and days of following winds. What did we want with a dead nose-ender? We with our squaresail, the child of our dreams.

So we waited, waited till the wind shifted to northwest. Then away we went. Bound for Vigo — just the two of us in a ten-tonner with no auxiliary. Nothing extraordinary, but the first step of a great venture for us.

The fact that it was a Friday and that the radio weather forecast promised a gale did not damp our enthusiasm. At last we had a free wind, a soldier's breeze — that was the main concern. Under jib, staysail, trysail and mizzen, we glided out of the harbor at noon of an early September day. Four hours later we had our last glimpse of old England — the dull gray hump of Lizard Head disappearing beneath the solid curtain of a chasing rain squall. We settled down to a sou'westerly course. We donned oilskins and wrapped towels around our necks. We watched the patent log spinning merrily 'round, and we were happy. We were making southing. We had really started at last.

By dusk we were not feeling quite so cheerful. Each afternoon squall had become harder and longer so that the periods between them were now almost negligible. It was beginning to blow hard enough for the seas to become dangerous instead of merely boisterous. Life was no longer a game, it was becoming hard work. We were traveling too fast, anyway. Seven knots in smooth water may be no great speed but in a rough sea with a boat of our size it can be too much of a good thing. We downed the staysail and mizzen and reduced our trysail to proportions that must have looked absurd. Still, as we fell in with no ships, we did not feel self-conscious on that score, and, certainly, we felt more comfortable.

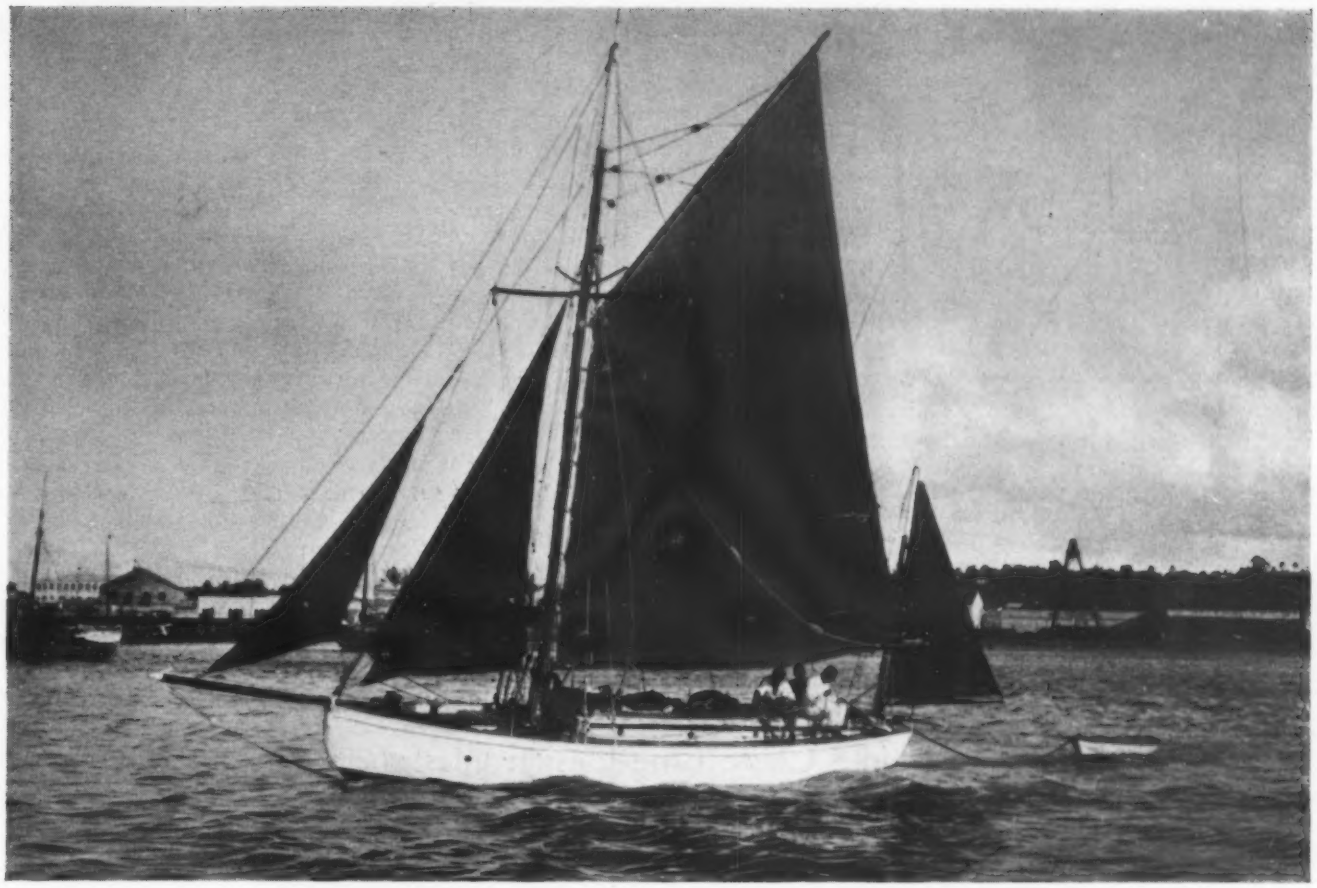
For a time the going was easier. Those green seas leaping on deck abeam were not, for the moment, so frequent. But as the hours dragged by conditions became worse. It grew into what is commonly known as "a wild night." Perhaps the wind and sea were not quite as wild as our course. Too often there was the necessity to luff or bear away in an attempt — which was usually in vain — to evade the ominous crashing of a wave dead abeam to windward. And far too often our efforts were futile. The sea got aboard, to come swirling aft and leap joyously over the cockpit coaming. We might have hove to, but we consoled ourselves with the fact that the farther south we made the better our chance of getting out of the gale area. We also had faith in the self-bailing capacity of our cockpit. After all, the water in that cockpit was simply draining back whence it came, and we *were* making excellent headway towards Vigo.

Dawn — and our optimism received a decided jar. The watch below rolled out of his bunk to find the cabin floor awash. That we had sprung a leak was our first conclusion. Investigation, however, proved it to be the cockpit which was found to be draining into the bilge instead of into the sea. But a misbehaving cockpit is better than a leaking ship, so we tackled the pump with no great worry in our hearts. Consternation! The pump refused to work. We cursed the thing roundly but it was not the fault of the pump. You can hardly expect any pump to function when it is asked to cope with myriad pieces of paper. Lifting the galley floorboards enlightened us as to the real trouble. All that water sluicing around the bilge had reached our canned food, so neatly stowed away beneath the bunks, and had washed off all the labels. From then on we often heated a tin of peaches expecting to find pork and beans. Our immediate concern, though, was the emptying of the bilge of the paper strewn water. We were forced to bail with a bucket. Four little words: "bail with a bucket." Simple words with a simple inference. Damned simple when you are dancing a highland fling in the middle of the Bay. But the deed was done, and God knows how, for only a quarter of a bucket ever reached the waiting helmsman and he more often than not managed to ship a fresh green one while he was occupied in emptying it. The next supply of preserved food we take aboard will be in glass jars — no more labels.

We had hardly finished with that exhausting business before the second catastrophe came along. On going below we found the chronometer upside down on the floor. During one of the *Uldra's* super-reels it must have jumped its two-inch protecting bar, and in one second of new born liberty had gone hurtling to a jolting crash on the floor. We found it still ticking, good tempered thing, but it had suffered an internal rupture, for we later discovered that a steady seven-tenths of a second gain per day had become a gallop of sixteen seconds. Besides an exceedingly unreliable watch, this was the only timepiece aboard so that the rest of the run was made by dead reckoning. And your dead reckoning can be dead wrong at times, especially in the Bay in dirty weather.

At length the nor'wester subsided and we flapped peacefully along under full sail till a northeasterly breeze found us and hurried us off for Vigo once again. It was a good, wholesome wind and we made the mistake of reckoning the time of our expected arrival at Vigo almost to the minute. Thereupon the wind shifted east and began to strengthen. In the middle of the night our reaching foresail had to be fought with and by dawn we were smashing along through a tumbling sea which had, as before, the awkward habit of jumping aboard green amidships. We tucked down two reefs in the main and staggered on.

All this time we were studying our *Pilot Guide* endeavoring to discover in what direction the currents were running. We knew that we were not more than a fair day's sail from the coast of Spain, and the *Guide* told us that in this region a



"Uldra" is 32.7 feet over all, 9 feet beam and 4.9 feet draft. She was built in 1905

moderately reliable current was to be found running to the eastward, from the Atlantic into the Bay. We trusted to this and, with the supposition that we had a weather-going current, we made no allowance for leeway. We held on doggedly, scanning the horizon next morning for signs of land. All that welcomed us were banks of low, rain-heavy cumulus that presently drifted over us, emptying copiously, and completely annihilating our wonderful easterly.

The rain ceased and we rolled in an oily calm all day, exciting ourselves over the teasing patches of darkened water that disappeared as soon as they arrived. Visibility was poor. Great smoky clouds rested on the water all around us and wreathed themselves into fantastic shapes which more than once, to our eager eyes, spelled land to the south.

Just before sunset a light breeze sent that veil of clouds rolling away eastward but, to our perplexity, the rugged heights of Spain did not reveal themselves. The situation was disturbing in that it cast a poor reflection on our capacity as dead reckoners. By our calculations the land could be but thirty miles off, at the most. Imagine, too, our amazement when night fell and we had traveled another ten miles south but no light appeared. Not even the slightest hint of a loom. We swung our course to the southeast, thinking that we were too far out in the ocean and that we should close with the land. Once again the wind deserted us, leaving the *Uldra* slatting to and fro beneath a lovely ceiling of stars. But what did we care for stars just then? Our despondency was shown by the entry in the log at 10:00 p.m. which ran: "No wind — no lights — no nothing."

But all things come to them who wait and during a spell on the crosstrees the faint loom of a four-flash light rewarded our patience. A gentle westerly wafted obligingly down to us. We trimmed our sheets and crept landwards. The light we had spotted was Cape Villiano. By morning we were to windward of it and but a mile or so offshore. The smell of heather from those rugged, purple hills was good to scent.

It was not far to the renowned Finisterre but the wind was light and ahead and an irritating joggle of sea held us back. By the time we were abeam of that precipitous ending of the land, the sun was sinking low. The breeze remained ahead and lightened and there seemed the possibility of fog. We glanced at the enticing waters behind the Cape, at the steep mauve slopes of the mountains, the mellowed greens and browns of the flat lands at their feet, the dark, shadowed valleys, the hundred quaintly rigged little fishing craft setting out in line for the night's fishing. We gave one brief thought to the night we might spend rolling about in the calm of a fog and succumbed to temptation. We altered course, rounded the Cape, and ran slowly up to the peace of Corcubion Inlet. We were just over five days out from Falmouth.

It was almost dark by the time we had anchored off that tiny town and nothing we could do would bring the *aduano* off to clear us. The yellow lights of the quayside cafés and the allurement of a possible glass of wine beneath the still trees of the plaza drove us to drastic measures. Frantically we waved our ensign, we hooted again and again on the fog horn, we shouted until we had the whole population gaping at us from the pier end. The whole of the population save the *aduano*. At last, in desperation, we decided to risk breaking the law. We accepted the offer of a swivel-eyed old pirate in a rowboat (our own frail dinghy would never have lived under the ravages of that herd of youthful Spain on the jetty) and rowed ashore. Under the escort of "swivel eye" and a straggling retinue of curious inhabitants, we set off on our search for the missing *aduano*. Down cobbled streets of crooked, balconied houses, into cafés and strange dim buildings, we followed our guide. We covered the whole town. Where could that man be? Then *Ha! Bueno!* Here he was at last lying back in a barber's chair having his nostrils trimmed.

With extravagant gestures we explained our presence,

(Continued on page 119)

These little sloops have done much to encourage racing on inland lakes in the United States and Canada

The Development of the Interlake and Pointe Claire One-Design Classes

By "BEAVER"

THE past few years have seen a rather remarkable development in small racing classes, many of which are either one-design in character or else restricted in order to produce good boats at low cost. These classes include various types and sizes, some designed specially for home building as well as those more difficult to construct. In the latter category is a class which has been developed in the United States and Canada, 19-foot centerboard sloops designed by C. D. Mower some years ago. This class was adopted independently at Skaneateles, New York; on Owasco Lake, near Auburn, New York; and on Cayuga Lake, at Ithaca, New York; in Canada on Lake St. Louis, near Montreal, on Lake Massawippi, near North Hatley, and on the Muskoka Lakes.

The boats are fast, comfortable and seaworthy; they give the best of racing, are well suited for knockabout sailing and also for limited cruising. They are suitable for use on the numerous lakes of Canada and the United States.

The principal dimensions of these little sloops are as follows: Length over all, 19 feet; on water line, 14 feet; beam, 6 feet, 6 inches; draft of hull, 6 inches; minimum freeboard, 16 inches. A study of the lines shows a powerful midship section with little deadrise and firm bilges, fined out forward to give a relatively dry hull form that stands up well in a sea without too much pounding. The cut off transom and outboard rudder give a lot of room for the length of the boat and the amount of space inside these 19-footers is quite surprising. The jib-headed sloop rig is moderate in proportion, the total area being 204 square feet of which 165 are in the mainsail and 39 in the jib. Light sails are used, and there is no standard design, though most of the clubs now use a combined reaching and running sail hoisting just above the jibstay.

Construction is simple but strong, the Canadian craft being somewhat heavier than called for by the original plans and specifications. As an indication of how they compare with other classes in speed, they have beaten Stars in fresh breezes though the latter are faster in light winds.

The class has developed simultaneously and independently in both the United States and Canada; there now are seven or eight fleets and a total of possibly fifty boats in all will take part in next summer's activities. A brief outline of the history of the class should be of interest.

In the United States the Owasco Yacht Club, the Skaneateles Sailing Club, and the Ithaca Yacht Club, all situated relatively close together in Central New York, have adopted and fostered the class. It is recognized by the Central New York Yacht Racing Association and is one of the most numerous at its annual regatta. The boats are known as the Interlake Class and their racing is a big feature of the season's sailing at these clubs.

The Owasco Yacht Club first started the Interlake Class, in 1925, with a fleet of five. The boats were an immediate success and now number eleven at that club. When the Skaneateles Sailing Club was formed, in 1931, the class was adopted there. On Cayuga Lake the Ithaca Yacht Club has two Interlakes, and four more will be added to the class there for next summer's use. The Interlakes are easily transported on trailers and a big fleet of them is expected to take part in the Central New York Yacht Racing Association Regatta to be held the coming Summer on Skaneateles Lake. Interclub racing is a feature of the season's sport in this district, and the Interlakes are much used for these races, the boats of the home club being sailed, thus saving the expense of transportation.

Two other classes, based on the original Interlake design, have also become popular. These are the Harpoon Class of the Richmond County Yacht Club, of Staten Island, and the class developed for the Buffalo Canoe Club last spring. Both are from designs by C. D. Mower and their plans appeared in the May, 1934, and January, 1935, issues of YACHTING. The Harpoons are slightly shorter than the Interlakes, and carry a more modern rig, with an overlapping jib and the main boom shortened to bring the rig inboard. Ten Harpoons

Top. The Pointe Claire Yacht Club, on Lake St. Louis, near Montreal, has the "PC" Class

Above. One of the Buffalo Canoe Club's One-Design 21-footers footing it in a breeze

Right. A trio of the Richmond County Yacht Club's "Harpoons" racing off Great Kills, Staten Island

were built in the spring of 1934 and had a successful season. The class has been adopted by the Raritan Bay Yacht Racing Association.

The Buffalo boats are slightly longer, being 21 feet over all. The rudder is inboard, and the rig is modern, with Genoa jib and parachute spinnaker. These boats have proved able to stand up in heavy going and are fast and dry.

The 19-footers have been used in Canada for a number of years, both on the beautiful Muskoka Lakes in Ontario, where the Beaumaris Yacht Club has a fleet of eight or ten boats, and at the North Hatley Yacht Club on Lake Massawippi, some 90 miles from Montreal. The class was adopted at North Hatley in 1923 and raced with the half-raters then in existence until 1926, when Col. O. L. Pope donated a trophy to be sailed for by the 19-footers, boats of other classes then owned on the lake being allowed to compete for a limited time. Prospects are also good that the class will be taken up on Brome Lake and Lake Memphremagog, as well as in other parts of Canada.

The Pointe Claire Yacht Club is situated on Lake St. Louis, fifteen miles from Montreal, and is a relatively small but very active organization, the proportion of boats to members being high. For some time it had been felt that a small one-design class would round out the club's fleet, and when one of the 19-footers was built in 1926, club officials hoped a class of this type would be developed. Not until 1933 was further interest shown; in that year another 19-footer was ordered and the pair then raced with two other sloops of similar size and speed in a small sloop class. From this developed the present P. C. Class, as it is known, which will number at least seven boats next summer and possibly ten, counting in the new P. C.'s now being built.

In 1934 an informal interclub series was sailed between the Pointe Claire and North Hatley Yacht Clubs. Two teams represented each club; four races were sailed on Lake Massawippi and four on Lake

(*Continued on page 120*)

In the foreground is the new municipal marina at Charleston, S. C., during construction. It connects with the Ashley River and will give visiting yachts a sheltered berth in the downtown section of the city

The Month in Yachting

"Yankee" Begins Quest for International Honors

NO AMERICAN pleasure craft bound on a quest for international honors ever left home amid such a burst of enthusiasm and laden with so many good wishes as Commodore Gerard B. Lambert's bronze cutter. *Yankee* made sail off old Boston Light about noon on April 25th, headed off for Gosport, England, to meet, as did the *America* eighty-four years ago, the entire British major racing fleet.

At *Yankee's* wheel for the first few hours was her designer, Frank Cabot Paine, in charge of the yacht for this passage, with John Parkinson, of *Rainbow's* afterguard as assistant skipper, and Alfred F. Loomis of New York as navigator. Her old professional, Captain Gus (Sandpaper) Olsen, is sailing master, and the crew of twenty before the mast is made up mostly from men who have sailed on *Vanitie*, but with representatives from the crews of *Yankee, Weetamoe* and *Rainbow*. Not far astern was Commodore Lambert's flagship, the three-masted schooner *Atlantic*. Aboard her as guests are Mr. and Mrs. William H. Potter, Jr., who have been on *Vanitie* during the past two years, and Dr. S. G. Humphries, of New York.

Yankee's regular professional sailing master, Captain John (Cocoanut)Christensen, who has been in poor health, went ahead by steamer and took command as soon as *Yankee* reached Gosport.

To many Boston yachtsmen *Yankee's* departure was a sorrowful event, for they believe she will never return. It is predicted that Commodore Lambert, after enjoying a racing season of three months in the North Sea and the English Channel, with forty-one events on the schedule, will dispose of her to some English yachtsman, and return to build, in case of the expected challenge for the America's Cup next year, a candidate for its defense, designed by Frank Paine and constructed at Lawley's.

It may seem somewhat far-fetched, but it is true, nevertheless, that if an Englishman or some other foreigner should carry back the famous flagon, *Yankee*, having made the Transatlantic passage under her own canvas, would be eligible as a candidate for challenger under the deed of gift.

Not since *Vigilant* left for the Clyde forty-one years before, has a yacht of the Cup class been so comfortably equipped as *Yankee*. Remembering the British criticism of *Rainbow's* somewhat meager fittings, Commodore Lambert spared no expense in making the yacht conform with the letter as well as with the spirit of the new rule requiring livable accommodations. Although Commodore Lambert will make the *Atlantic* his floating headquarters abroad, he will occupy the beautiful white mahogany-sheathed stateroom on *Yankee's* port side during the racing, and expects to entertain handsomely in the main saloon, which is designed to take care of a dozen or more guests. Both afterguard and crew are also well berthed.

Boston rose to the occasion when *Yankee*, at the end of a stout tow line, started down the harbor at 10.00 a.m. on April 25th, timed to the minute that Commodore Lambert had set for her departure four months before. Whistles shrieked and guns boomed as the white yacht, followed by the black *Atlantic*, streaked down the main ship channel and made sail off the Graves about noon. An hour later both had beat out to Boston Lightship against a light easterly breeze and about 1.00 p.m. took departure from the floating beacon, *Yankee* under main, jigger and Genoa jib, and *Atlantic* with three lowers, three topsails and four jibs. As both yachts carried two-way radios, they were in constant touch throughout the passage.

Among the forty-odd races ahead of

Yankee are three at Havre, where no American yacht has sailed since the schooners *Enchantress* and *Faustine* visited the French port in 1873, and where they met with only fair success. She will also compete, late in July, in four races at Ryde under the colors of the Royal Victoria and Royal Thames Yacht Clubs, both of which have made Commodore Lambert an honorary member. The full schedule is as follows:

June 1, 3, Harwich; June 4, Harwich to Southend; June 6, 7, Southend; June 8, Nore to Dover; June 10, 11, Dover; June 15, Deal; June 22, Lymington; June 27, Fowey; June 28, 29, Falmouth; July 2, 3, 4, 5, 6, Plymouth; July 11, 12, 13, Havre; July 20, Bournemouth; July 27, Lymington; July 29, 30, 31, August 1, Ryde; August 3, 5, 6, 7, 8, 9, Cowes Week; August 16, Plymouth; August 19, 20, 21, 22, 23, Torbay; August 30, 31, Dartmouth.

WM. U. SWAN

\+ + +

"Yankee's" Crossing

THE cutter *Yankee* led *Atlantic* all the way across the Western Ocean, though the big schooner set a higher mark for a noon to noon run, 303 miles made on May 6th–7th, the cutter's best figures being 280 to noon of May 4th. With the light winds prevailing off our coast, *Yankee* soon gathered a commanding lead. Then she started to reel off the miles, with a fine sou'wester that shoved the two yachts along in great shape for four days. Then it eased up, but *Yankee* seemed to keep on going. Her day's runs, reported by radio, were, beginning May 1st.: 187, 254, 226, 280, 179, 204, and 254 to noon of the 7th. She covered 2,454 miles in the first twelve days, but then the wind shifted ahead and both yachts slowed down. *Yankee* passed the Lizard at 2:20 a.m. on May 12th, many hours ahead of her consort. They arrived at Cowes at 10 p.m. on May 13th, *Yankee* being towed in by T. O. M. Sopwith's *Vita II*.

Yankee came through unscathed, while *Atlantic* lost her inner jib and several feet of bulwarks on the 5th, when she was hove to for three hours. A full account of *Yankee's* passage, by Alfred F. Loomis (who navigated her across) will appear in the next issue of YACHTING.

\+ + +

Municipal Marina Awakens Boating Interest in Charleston

THE new municipal marina in Charleston, S. C., built under the federal civil works program, has stirred up more boating interest than the city has ever known. The basin provides the first fully protected haven for pleasure craft in Charleston and has awakened the boating bug which long has been inactive because of the lack of proper mooring facilities.

The new marina is one of the finest on the Atlantic Coast. It is located on the Ashley River, directly opposite the entrance to the intracoastal waterway leading south to Beaufort. An 11-foot channel connects the Ashley with the basin, which has a depth of eight feet at low water. More than 1,500 feet of docking space is provided along its piers and landing floats.

The basin is well lighted and has connecting sockets on the piers. A water main and fuel line also are laid along the central pier, which is 540 feet in length. A 400-foot catwalk is provided for smaller local boats and another 100-foot landing walk, with locker house, for outboard craft and motors.

The marina office building, which was drawn into the basin plans as a "tool house" also serves as a lounge and temporary headquarters for the Charleston Yacht Club.

Work on the basin was started in December, 1933, and twelve months

Ray Chapin

"Mystery," owned by W. A. Bartholomae, Jr., of Los Angeles. She took second place in the Mid-Winter Series

One of the new boats of the year is this Jonesport 28-foot sport cruiser. She is powered with a Kermath Sea-Eagle which drives her better than 16 m.p.h. She has 8½ feet beam and 30 inches draft

M. Rosenfeld

"Parthenia," owned by Parker Converse, one of the new Alden motor sailers built by Graves, going through her paces in Marblehead Harbor. She is 32 feet 7 inches over all and 11 feet beam. She makes 9 m.p.h. under power alone with a 45 hp. Red Wing motor

later the first pleasure boat entered. Formal dedication occurred on March 28th, in connection with Charleston's annual Azalea Week festival.

Credit for the new basin goes to Mayor Burnet R. Maybank and Edmund H. Jahnz, commodore of the Charleston Yacht Club. They initiated the plan for a municipal marina and obtained the coöperation of federal officials.

\+ + +

Schooner "Yankee" Home Again

AFTER an 18-month voyage around the world, the 90-foot schooner *Yankee*, Captain Irving Johnson, anchored in Gloucester, Mass., on May 5th. She sailed from these shores in November, 1933, and spent much time in the Pacific, visiting many out of the way islands and discovering an uncharted cluster near the Admiralty Group. She called at St. Helena and Devil's Island on the homeward voyage via the Cape of Good Hope, and visited British Guiana and Bermuda. Her crew, largely composed of amateurs, were all in good shape and very enthusiastic.

\+ + +

Horace E. Boucher

HORACE E. BOUCHER, yachtsman, maker of yacht and ship models, and long identified with yachting as chairman of the race committees of the Larchmont, Atlantic, and Manhasset Bay Yacht Clubs, and other organizations, died at his home in New York on April 27th. He was 62 years of age.

While very active in yachting and yacht racing affairs, it is, perhaps, as a maker of models that Mr. Boucher was best known. He was president of the H. E. Boucher Manufacturing Company. Many of the models of famous yachts in the model collection of the New York Yacht Club, particularly those of boats that have defended the America's Cup, are the work of this firm. All are excellent examples of model making art, executed with faithful accuracy.

Long a member of the New York Yacht Club, and of the Manhasset Bay Yacht Club, he was also a member of the Society of Naval Architects and Marine Engineers, and of the Veterans Association of the Twenty-Third Regiment, Brooklyn.

A graduate of Trinity College, he learned his craft at the navy yard in Washington in 1890. Within a short time he was put in charge of the United States Naval Model Shop in Washington, where he undertook the design and building of model warships of all types, and he inaugurated the practice of tank tests, towing the models through a long tank, each hull attached to a separate dynamometer which registered the resistance at different speeds and furnished data to figure the most economic horsepower necessary to drive the vessel.

It was in 1905 that Mr. Boucher opened his first studio in New York, at 95 Maiden Lane. He had only two assistants to begin with, but so great was the demand for his ship models that he soon had to expand the business. One of his first more important commissions was to design a model of Morton F. Plant's steam yacht *Iolanda*, then anchored in the harbor of Marseilles. Mr. Boucher went to France and made a faithful miniature replica of the craft.

His work eventually expanded into other types of models. These included a sectional model of the great concrete and steel caissons that support the Woolworth Building. In 1930 Mr. Boucher completed a model in ceramics of the George Washington Bridge.

Among some of his famous models of sailing ships were those of the *Royal George* and the *Royal William*. They are now in the collection of F. C. Fletcher in Brookline, Mass.

He constructed a group of 175 warships showing the growth of the American Navy from the *Bonhomme Richard*, which flew the flag of the Colonies in 1776, through the *Constitution*, the *Constellation*, the *New Hampshire* and to the most modern ships, from submarines to superdreadnoughts.

\+ + +

Inter-Class Team Matches Scheduled

THE Long Island Sound Interclubs will meet the Victories in another team race this fall. The race will be run under the auspices of the Manhasset Bay Yacht Club on September 8th. In past years there have been several team races between the two fleets of one-design boats, the Victories having had the best of it. The new rigs have, according to their skippers, improved the speed of the Interclubs so that a good battle may be anticipated.

Cornelius Shields has been reëlected chairman of the Interclub Association; Egbert Moxham has been chosen Secretary, and the class committee is made up of Edward A. Hodge, Ralph Manny and M. O. Griffiths.

Two other team races have been arranged, the Victories meeting the Atlantics and the "S" Class on different Sundays in August.

Annual Dinghy Regatta at Essex

THE dinghy clan gathered at Essex for the Essex's Yacht Club's annual spring regatta on Saturday, May 4th, found a spotty north wind, which, combined with an ebb tide, made for ticklish sailing that afternoon. Sunday morning brought a southeast breeze that increased in intensity with the clock, and a series of broken halliards, stays, etc., kept the operators of the "crash boat" on their toes. During the first race for Class B, open, the gear of Dick Hill's boat parted company, and in an effort to help him Frank Campbell was dismasted and tossed overboard. Two other contestants took the occupants of the disabled boats ashore, leaving only one boat in the running. Under the circumstances, her owner refused to finish the race.

In Class A, eighteen entrants staged a good battle. The fireworks in this class were furnished by Walter Rowe, in *Liza*, and Mrs. Helen Hill, sailing *Fanny Dunker II*, with the former winning by an eyelash, 128 to 123. C. H. Alvord's *Tadpole* was third with 119 points.

Patty, sailed by J. S. Sutphen, Jr., ran off with the honors in Class B, taking 63 points to the 53 piled up by W. L. Inslee's *Smoke*. The latter carried the standard rig, though the previous month she had raced in New London in the "open" class. *Snowdrop*, Butler Whiting, Jr., took third, with 43 points.

Cornelius Shields won out in the Class B, open, racing, although his *Prudence's* mast was sprung in the first race on Sunday. Hurried repairs enabled him to fight it out with A. S. Herreshoff's *Frost Fish*, which took 19 points to *Prudence's* 27. Seventeen points gave H. C. Hall's *Ice Pick* third place in the class.

Class D provided a double battle, a tie ending the fight for first place, with W. J. H. Dyer, sailing *Janice*, and W. W. Swan, in *Razzberry*, each winning 21 points. Second place was won by D. K. Fox, in *Ry-Hi*, by the slim margin of one point over H. M. Baker's *Squid*, with 16 points to her credit.

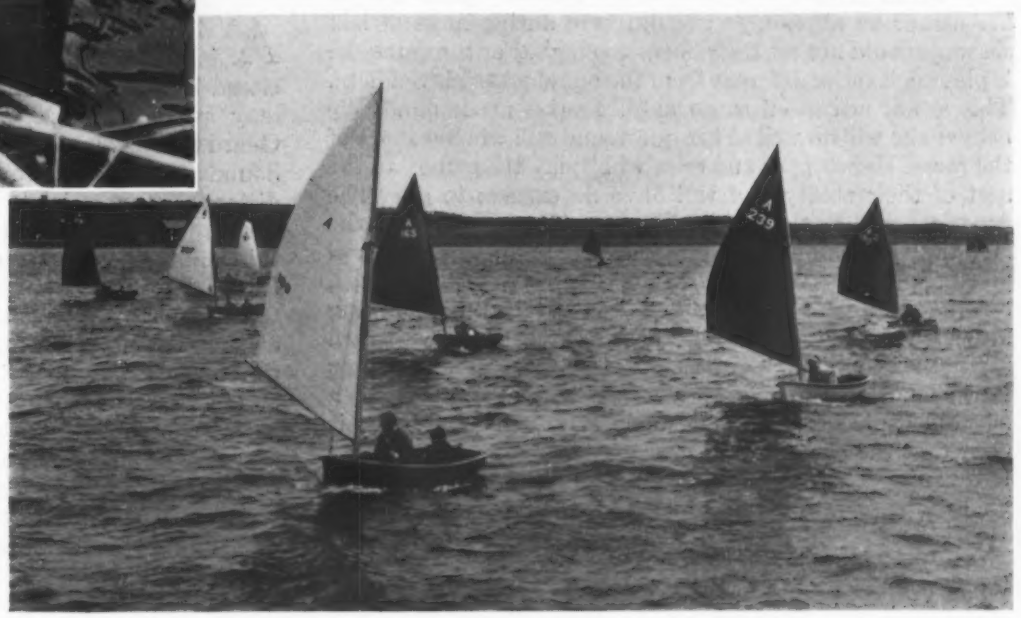
HAROLD A. PRESTON

On May 23rd, Comm. R. B. Graham, R.N., retired, and Major H. H. Kitchener sailed from Bermuda for Southampton, via the Azores, in the former's 30-foot cutter "Emanuel." In her, Commander Graham voyaged single-handed from Bantry, Ireland, to St. John's, N. F., last summer. Thence he went to Newport, R. I., and, in November, to Bermuda

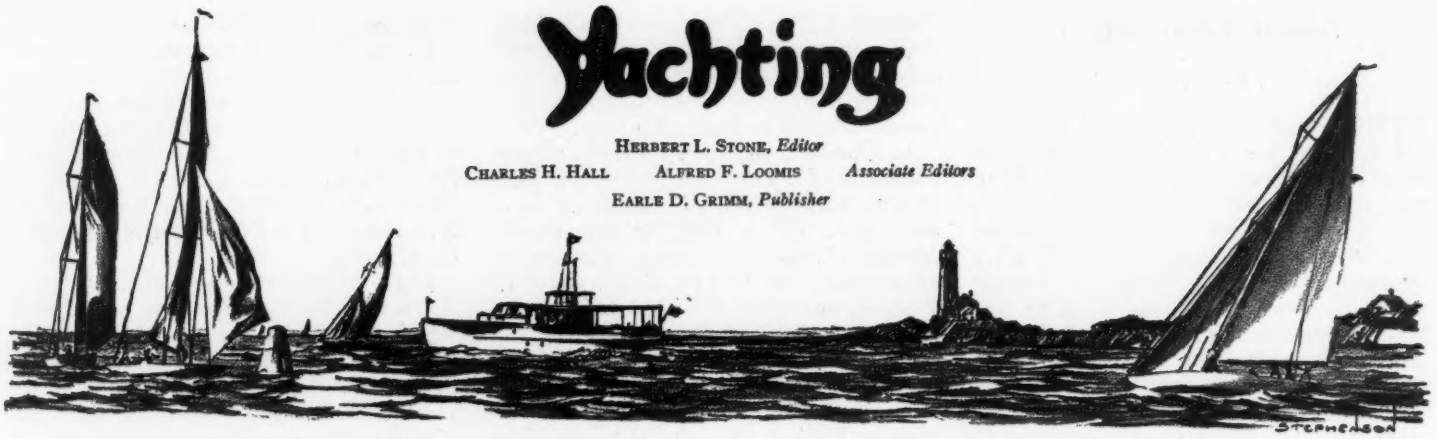
Wide World

Harold A. Preston

Here is a "wishbone" boom — some people call it a "horse collar" — used on one of the Open Class B frostbite dinghies. The details of this boat have been cleverly worked out; notice the tiller and the mast partners



Right. Class A dinghies in a run down wind



EDITORIAL

"Yankee's" Quest

WITH the arrival in British waters of the Class J cutter *Yankee* after a voyage of 18 days and some hours from Boston, this erstwhile seeker after America's Cup honors, now owned by Gerard B. Lambert, will be in the spotlight throughout the season of racing which opened the end of May, and her campaign will be followed with keen interest by American yachtsmen. It will be the first time in over forty years that we have had an opportunity to compare American and British yachts of large size racing in British waters, and under conditions with which the American crew are unfamiliar. In the rare cases when a large British cutter has raced here (only in the races for the America's Cup) the situation has been reversed.

What *Yankee*, undoubtedly one of our best Class J yachts, will do against the fine fleet of British cutters she will be called upon to meet is problematical. She will have to meet not only the very fast *Endeavour*, but the famous *Britannia*, always a dangerous competitor in spite of her forty years, *Velsheda*, *Astra*, *Shamrock V*, and others. To win consistently in this company *Yankee* needs not only to be fast but to be well sailed at all times, and to get her share of the breaks. We know that she is fast, we are sure she will be well handled. An article in this issue of YACHTING by Mr. Sherman Hoyt tells something about the local conditions she will be called upon to face, and this shows that she will need her share of the "breaks."

Those Americans who look to see *Yankee* "clean up" in her campaign abroad, as she did here during most of last season, should not set their hopes too high. For the game she is playing is quite different from the one she has played here. This is not advanced as an alibi. *Yankee* needs none. We believe she will do well in her quest, and will win her share of the races. Her skipper and crew will "play the game" to the best of their ability and will have no excuses to offer.The American and British public will do well to keep in view the fact that this is not an international match, with national prestige at stake (whatever that may mean in yacht racing), but merely a case of a yachtsman of one country entering into friendly competition for a season against the yachtsmen of another country. Viewed from this standpoint, *Yankee's* visit should result not only in a fine season's sport, but in a friendlier spirit and a better understanding. Surely this is needed at the present time.

\+ + +

For a Broader Yachting Experience

SPEAKING of the value of a better understanding both as to conditions in other countries and of the other fellow's point of view, a suggestion in the Royal Swedish Sailing Society's journal for an interchange of junior yachtsmen between Sweden and the United States will bear consideration. The suggestion, made by Mr. Knud H. Reimers, a Swedish yachtsman and naval architect, is that during the summer of each year a group of American youngsters visit Sweden as the guests of Swedish yachtsmen, and a like number of young Swedish yachtsmen come to America under the supervision of American yacht clubs or yachtsmen. By spending a summer racing and cruising in foreign waters, such fortunate juniors would have an opportunity to become familiar with the yachts and conditions in the country visited, thus broadening their experience and their viewpoint. At first, it is proposed to confine membership in such a group to sons (or daughters) of yacht club members, who would be guests of individual foreign yachtsmen.

If one of the leading yacht clubs in each of these two, or any two countries, could work together on such a plan, and make a careful selection of those making up the groups, the idea has much to recommend it. Undoubtedly, each group would return home greatly benefited by the experience. It is suggested that the steamship lines would gladly coöperate to keep the cost of transportation down, as it has done in the past in the case of Boy Scout, and other groups. It may be too late to test the idea this year, but next year, with the Olympics taking place in Europe, it might be possible.

\+ + +

Reopen Eaton's Neck Coast Guard Station

A YEAR or two ago the important Coast Guard Life Saving Station at Eaton's Point, Long Island Sound, was closed by the Treasury Department when a wave of economy swept that Department which operates the Coast Guard Service. In doing this, it left the shores of Long Island Sound unprotected from City Island to New London, a distance of over eighty miles. During the past winter and early spring no less than three vessels were in distress near this point, one being reported to have foundered with the loss of one life. In one of the other instances, the Coast Guard had to send a surf boat overland from the south side of Long Island, thirty miles distant, and muster a crew from that locality, only to arrive at the scene of trouble too late to be of service.

In view of the increasing number of commercial vessels and pleasure craft passing this point, which is at the entrance of Huntington Bay, frequently used for shelter, this is a serious condition. We are informed that the station itself and its equipment is intact, and that if a crew were assigned the station could be reopened at only the cost of maintenance, certainly a small enough price to pay for the protection afforded. Economy that fails to consider loss of life and property is poor economy.

IN THE WORLD OF YACHTING

GORDON RAYMOND

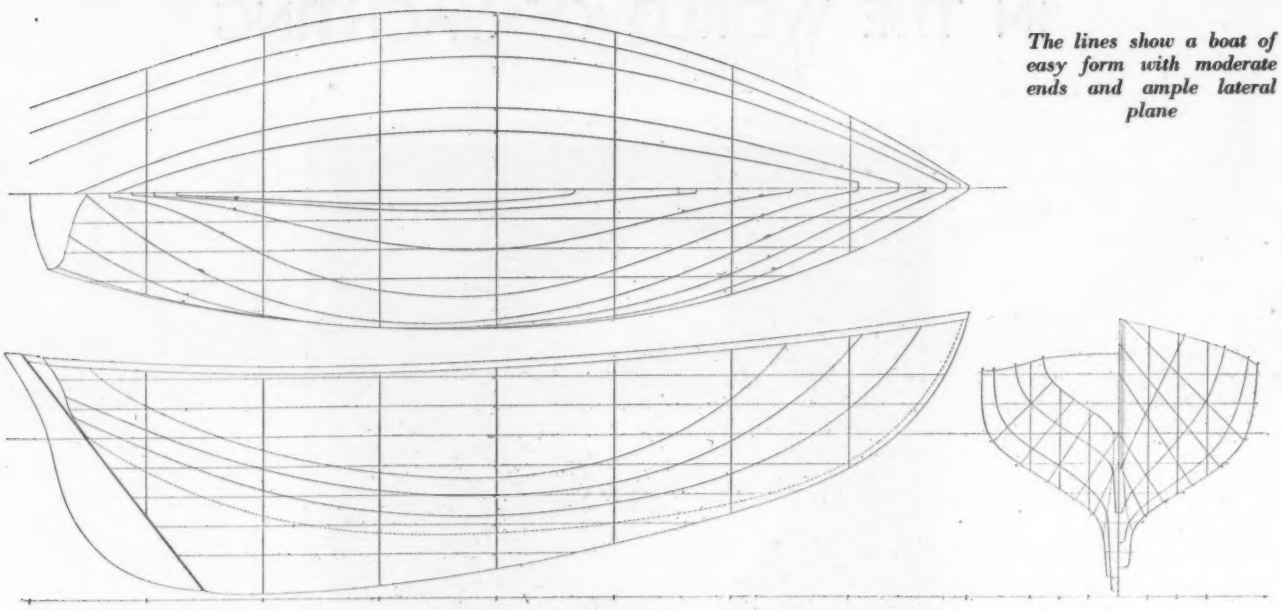
GORDON RAYMOND, one of Long Island Sound's best known racing skippers in the Interclub and Six-Metre Classes, has sailed so many different yachts during the past ten years that it is hard to identify him with any one boat. But in whatever class he sails he is usually up "there or thereabouts" at the finish of the season, and his name appeared in several of the lists of the ten best skippers sailing the smaller sized yachts. Which does not mean that he is not at home in the larger craft. For he has raced and sailed on the New York "Fifties" and "Forties" and the Ten-Metres, to say nothing of Bermuda ocean racers.

Gordon Raymond "learned his trade" thoroughly as a youngster. He sailed in all kinds of boats, at first on lower New York Bay and later on Long Island Sound, spending most of his time afloat or fitting out and rigging his own boats. He is a "top-notcher" at tuning up a racing yacht and getting her to go, and when he has done that he usually wins his share, or more, of the races he sails in her. At twelve years of age he was sailing his own 18-foot catboat with a barn door rudder, and at seventeen he acquired his first keel boat, a 30-foot sloop, and later a 50-foot cruiser.

He first appeared in the racing game on Long Island Sound in 1921 in his Indian Harbor Arrow Class "Kippewa," and in 1922 and '23 he took the championship of the class with her. During the next three years he was racing chiefly in the 20-rater (R) Class and in the Six-Metres, the latter then just becoming popular through the international competition they promoted.

A member of several interclub teams sailing in Bermuda waters, he was always a dangerous competitor, and in his own Interclub, the "Daphne," he was high point scorer in 1929 and runner up for the Bermuda Cup on the Sound, being dismasted in the last race. Since then he has campaigned other people's boats, chiefly "Chinook," in which he won the Bermuda Cup series, and "Canvasback," in which he was always near the top of the class. With her at one time he sailed in fifteen consecutive races to win nine firsts and never finishing below third. And this in a class averaging twenty starters per race. A record hard to beat.

Here is his picture, literally and figuratively.



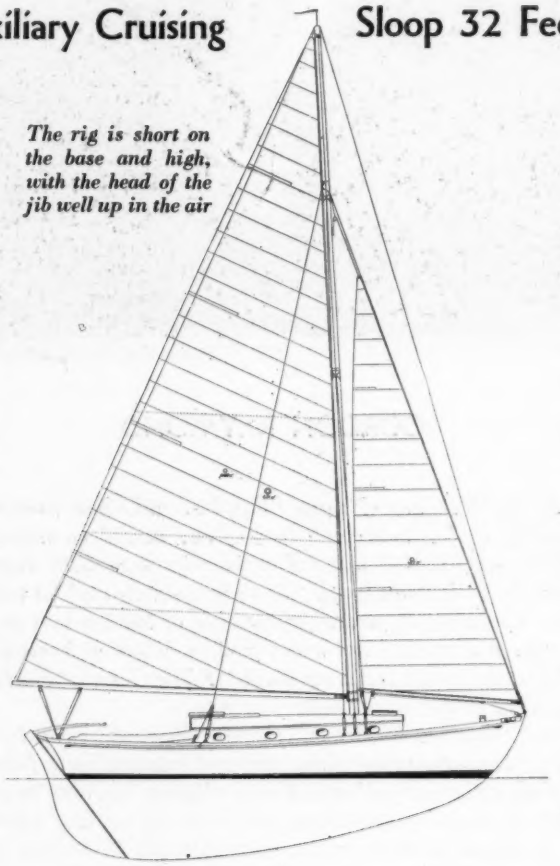
The lines show a boat of easy form with moderate ends and ample lateral plane

An Auxiliary Cruising Sloop 32 Feet Long

THE accompanying plans are those of a 32′ auxiliary cruising sloop from the board of Chris B. Nelson, Inc., naval architect of New York City. The plans were developed by John W. Lane, who is associated with the firm. The boat, which is under construction at a Long Island shipyard, is scheduled for delivery the latter part of July. The owner, who wishes to remain anonymous for the present, is a resident of the Middle West.

One of the principal requirements of the owner was that the boat should be of fine enough lines to be a smart sailer. With her short ends and long water line, she should be able to do well, considering her over all dimensions. She is 32′ 0″ in length over all, 27′ 8″ on the water line, 9′ 6″ beam and 5′ 4″ draft. She has an iron keel weighing 4500 pounds and 2000 pounds of iron trimming ballast inside.

Frames are of steam bent white oak, and the planking is of 1″ Philippine mahogany, fastened with Everdur bronze screws. Decks are canvas covered and cabin trunk is of Mexican mahogany, finished bright. Deck trim is also of Mexican mahogany.

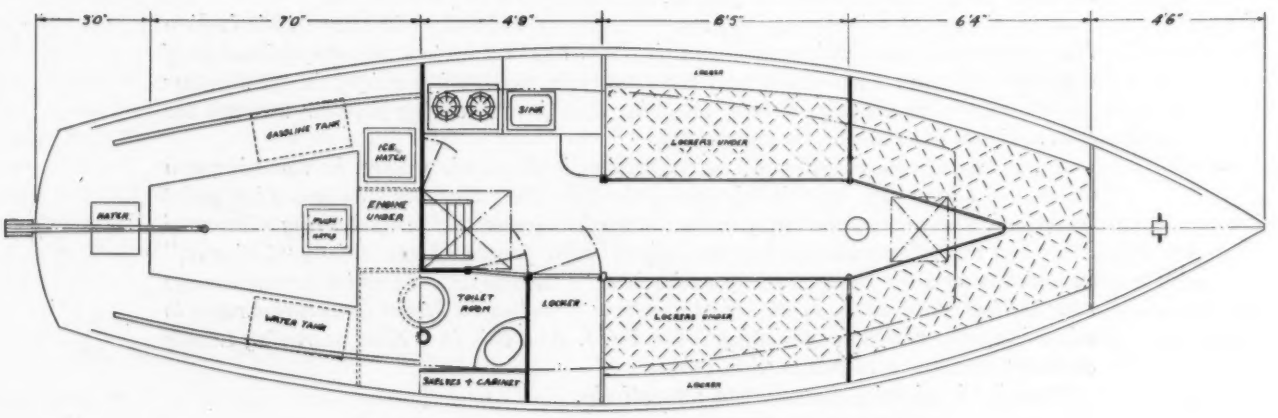


The rig is short on the base and high, with the head of the jib well up in the air

The mast is hollow and the fore triangle is relatively high to allow her to set large light sails. The working sail area is 631 square feet. Of this, 147 feet are in the jib and 484 in the mainsail.

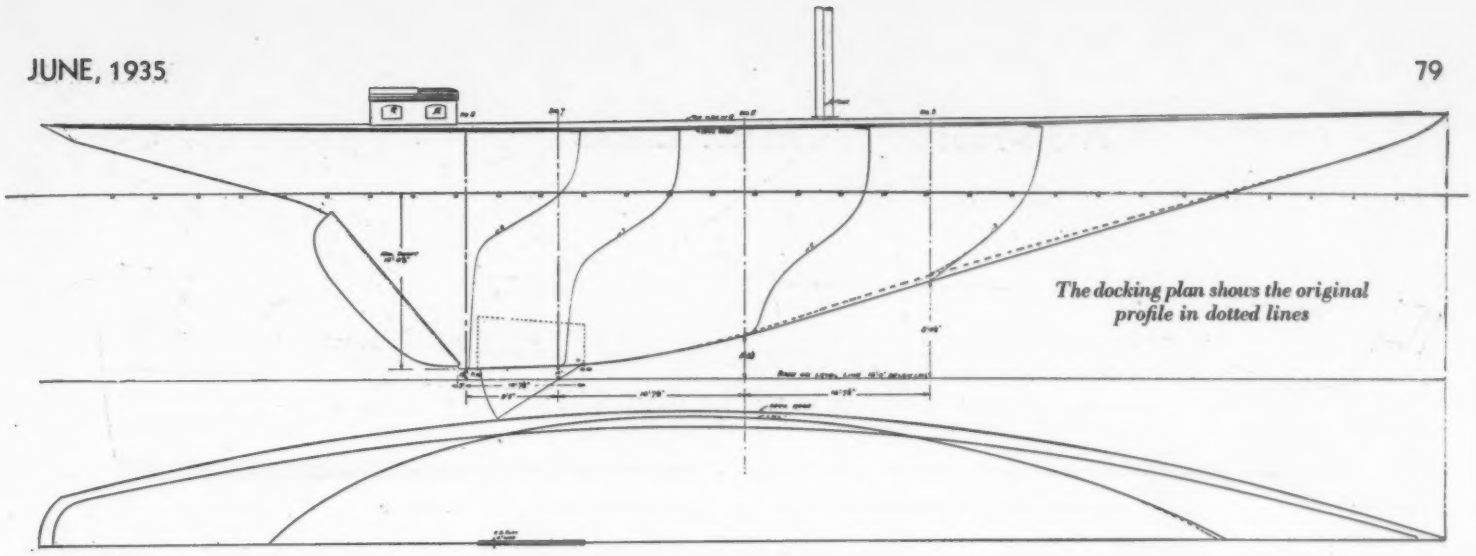
The power plant is a 4-cylinder Gray Sea Scout fitted with reduction gear. It will drive the boat about six miles an hour under power alone. It is located under the bridge deck abaft the cabin bulkhead and a flush hatch in the cockpit gives access to it. The gasoline tank is located under the deck in wake of the cockpit with a water tank of the same size opposite.

The interior arrangement is conventional and has berths for four persons. The bulkhead between cabin and galley goes no higher than the galley dresser, while those separating cabin and forward stateroom are cut away to permit easy access and give a feeling of roominess. There is full headroom throughout the boat.



The cabin plan is conventional, with full headroom throughout

The plans reproduced in this section are the property of the designers under whose name they appear. For further information concerning any design address the naval architect in question.



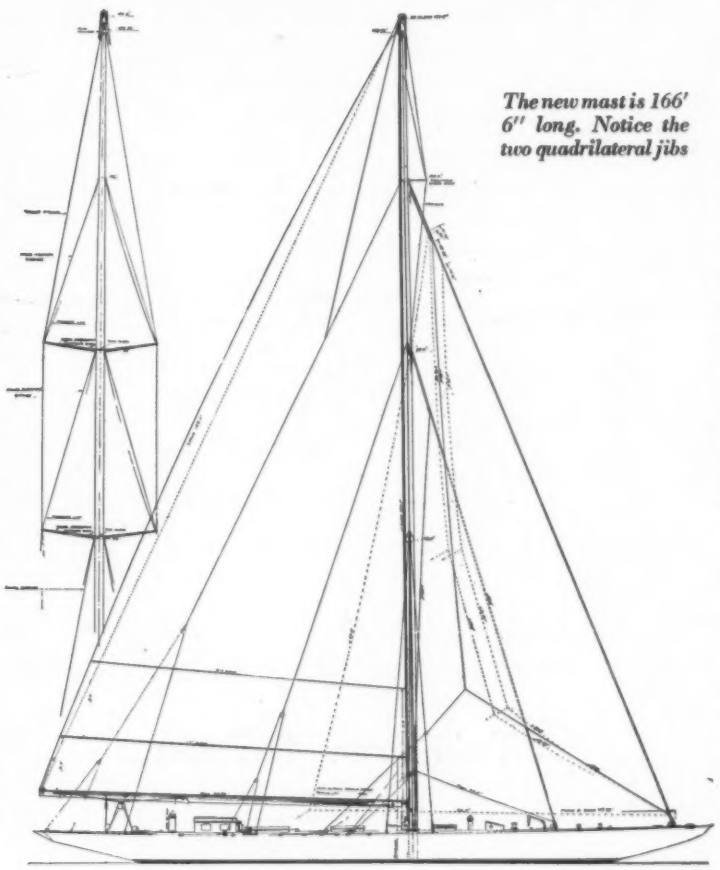
The docking plan shows the original profile in dotted lines

"Yankee" with Her New Rig

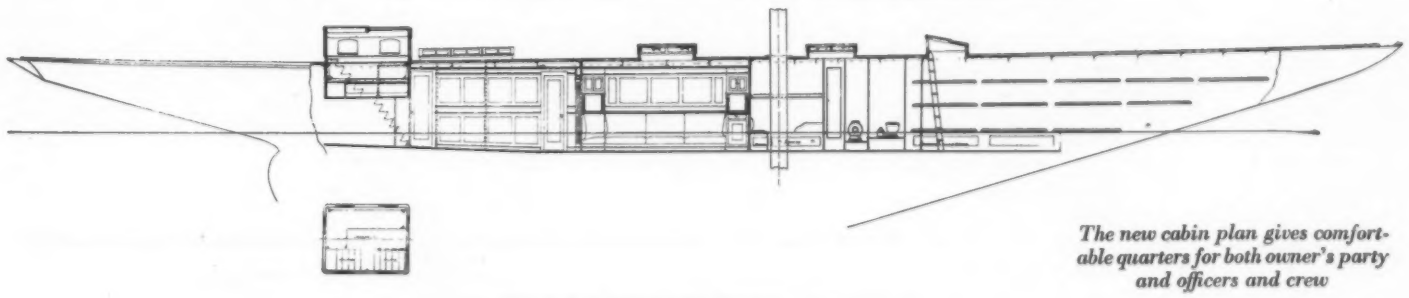
COMMODORE G. B. Lambert's Class J sloop *Yankee* is 126′ 0″ over all, 85′ 10″ l.w.l., 22′ 6″ beam and 15′ 0″ draft. Her displacement is 160 tons and her sail area 7,555 square feet. She has been entirely refitted and rerigged by her builders, George Lawley & Sons, under the supervision of her designers, Belknap & Paine, Inc. Last year she had extensive alterations made in hull and rig which improved her performance. Her profile forward was changed and her headsails rearranged.

The major change this year is in her rig. The mainsail is much the same but the headsails now consist of a high, narrow forestaysail, enormous jibs (including two quadrilaterals) and large genoas. She also carries a conventional double spinnaker. The new mast is built of special high tensile nickel steel, electrically welded and with a smooth shell. The few projections are small rigging attachments and doubling plates. Charles G. MacGregor, naval architect of Lynn, Mass., and Professor A. A. Packard were called in as consultants in developing the new spar, which is less than 19″ diameter (the size of *Endeavour's*) and far smaller than *Yankee's* old 18″ by 28″ wooden stick. There are only two sets of spreaders, single forestay, double jibstay, jumperstay, two lower shrouds, single lower and upper intermediate shrouds and topmast shrouds. Runners are fitted at the upper shrouds and preventer backstays at the jibstay. Preliminary tests before sailing for England proved the rigidity of the new mast.

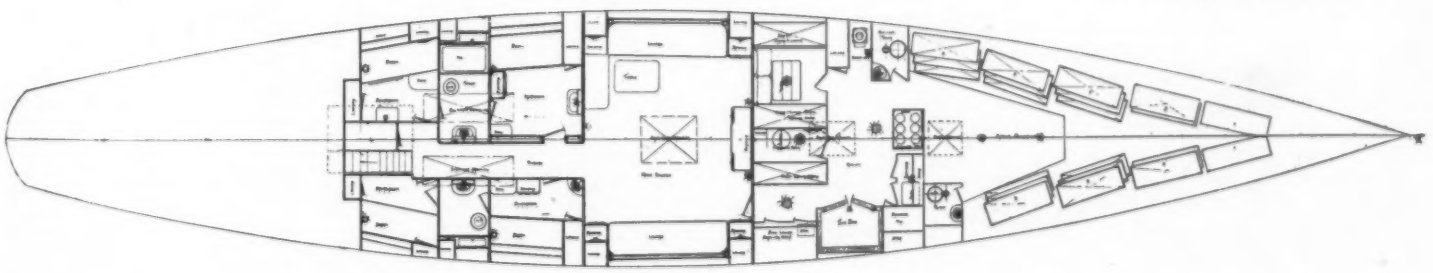
The yacht's entire interior has been rebuilt and a small deckhouse has been constructed over the main companionway. Owner's and guests' quarters are splendidly equipped, as the photographs on another page will show.



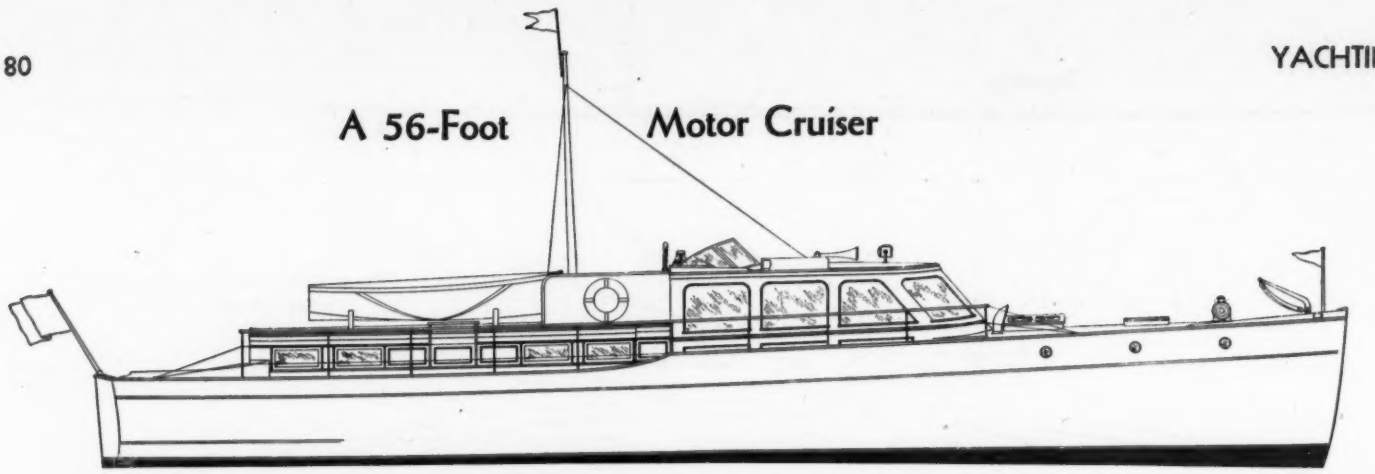
The new mast is 166′ 6″ long. Notice the two quadrilateral jibs



The new cabin plan gives comfortable quarters for both owner's party and officers and crew



A 56-Foot Motor Cruiser

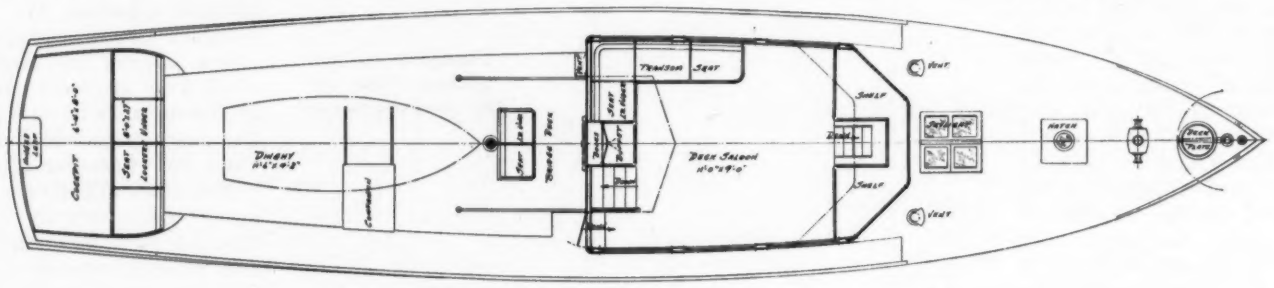


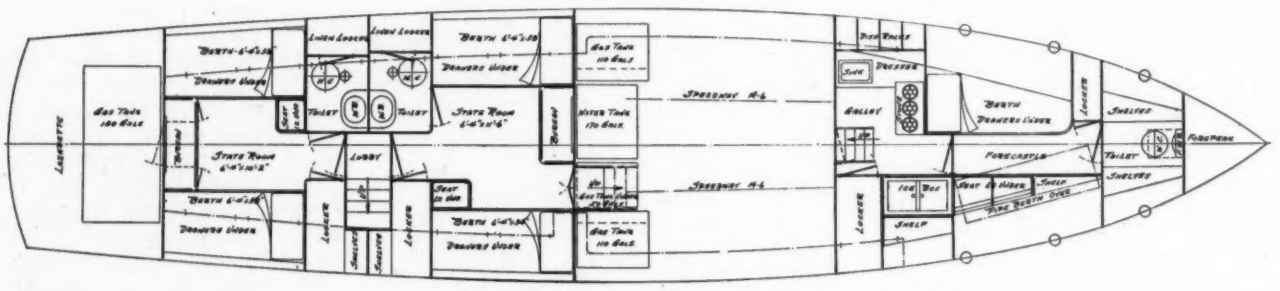
Outboard profile of the new motor cruiser. The bridge is abaft the deckhouse

THIS motor cruiser was designed by Sparkman & Stephens, Inc., for a member of the New York Yacht Club. The yacht is 56′ 6″ over all, 55′ l.w.l., 12′ 3″ beam and 3′ 3″ draft. The deckhouse serves as a combination living room and dining room.

Crew's quarters and galley are below decks forward, while aft are two double staterooms, each with toilet room.

The engines, a pair of 6-cylinder Speedway motors developing 250 hp. each at 1800 r.p.m., are housed amidships. The yacht's designed speed is approximately 20 m.p.h.





Deck and accommodation plans of the new boat by Sparkman & Stephens

A Twin Screw 43-Footer

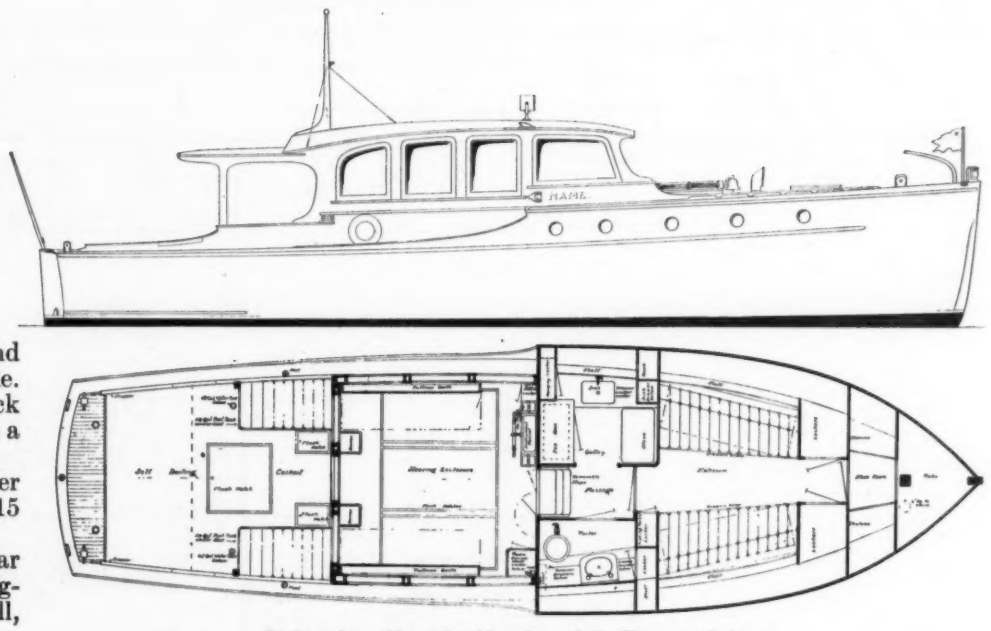
THESE plans show a motor boat designed by E. Lockwood Haggas, of Atlantic City, N. J., for a Philadelphia yachtsman. The hull is of the raised deck type with a steering enclosure over the motor compartment and a large open cockpit.

The accommodations consist of a stateroom forward with upper and lower berths each side. Abaft this room is the galley and a toilet room. Plenty of stowage space is provided.

The steering wheel and engine controls are located in the deckhouse and there is a pullman type berth each side. When these berths are folded back against the sides of the house, there is a good sized living and dining room.

Two 85 hp. reduction gear Chrysler engines drive her and a speed of 15 m.p.h. is expected.

The hull will be planked with cedar and house and trim will be of mahogany. Her dimensions are 42′ 9″ over all, 12′ 9″ beam and 3′ 2″ draft.



Outboard profile and cabin plan of the Haggas 43-footer

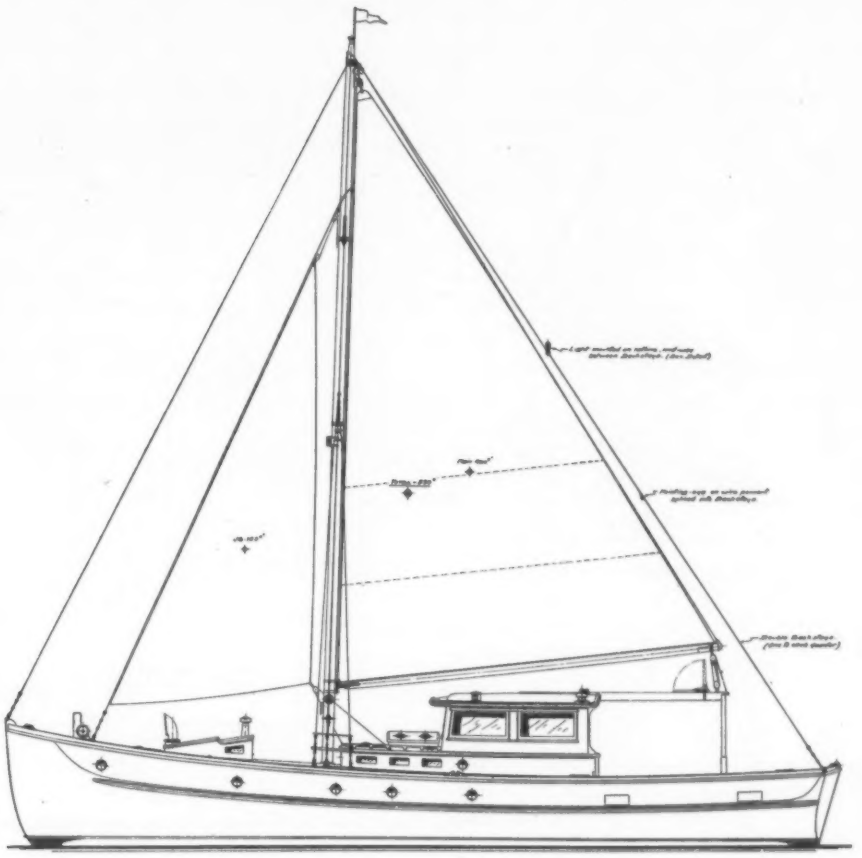
"Buckaroo," the Latest Motor Sailer by Hand

THE latest yacht from the board of William H. Hand, Jr., naval architect of New Bedford, Mass., is the *Buckaroo*, a new and interesting development of the motor sailer type. The vessel is now nearing completion at the yard of Hodgdon Brothers, East Boothbay, Maine. She is being built for Mr. Hand's personal use. Her principal dimensions are as follows: length over all, 51′ 8″; beam, extreme, 14′ 5″, and draft of water, 4′ 10″. In cruising trim her displacement is 25 tons.

In construction, she represents the best. Framing and beams are of white oak, outside planking is 1½″ mahogany and decks throughout are of teak. Cabin trunk, deck shelter, forward companionway and deck trim are also of teak.

The power plant is a Hall-Scott Navigator II, a 100 hp. motor fitted with 3:1 reduction gear. The fuel capacity provided, 520 gallons, will give the yacht a cruising radius of something more than 1,000 miles.

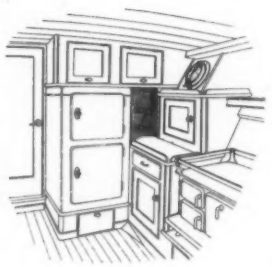
Buckaroo differs from the designer's recent yachts of the motor sailer type in a number of ways. The lines show a comparatively shallow hull with good beam and fairly slack bilges and rather light displacement. She should be well adapted for cruising and fishing along the Florida coast or elsewhere in shoal water. She should also show a good turn of speed under power.



The rig is moderate and the mast well stayed

The new yacht is sloop rigged and spreads 593 square feet of canvas. The area of the jib is 163 square feet and that of the mainsail is 430. The rig has a number of interesting details. Aft, for instance, there is a steel I-beam gallows frame extending the entire width of the hull. There is full headroom under it and it carries the main sheet, boom crotch (which is hinged so that it swings down out of the way when under sail), a catwalk extending forward to the deck shelter, and an awning. Another novelty is the location of the after range light. There are two permanent backstays from the masthead to the quarters, and the light is fixed on a ratline between them so that it is the proper height above the forward light. Thimbles for hoisting tackles are spliced into the backstays some 18 feet above the deck for getting swordfish and other heavy weights aboard. Wooden ratlines are fitted to the lower shrouds.

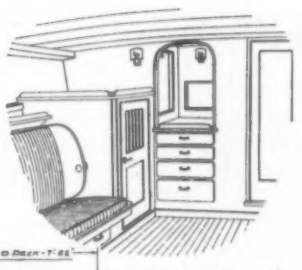
Below deck the crew is berthed forward. The galley is the full width and has Shipmate range, Monel sink, etc. The cabin, finished in ivory and walnut, has berths for four and aft is a stateroom with the toilet room opposite. On deck is a shelter and a cockpit.

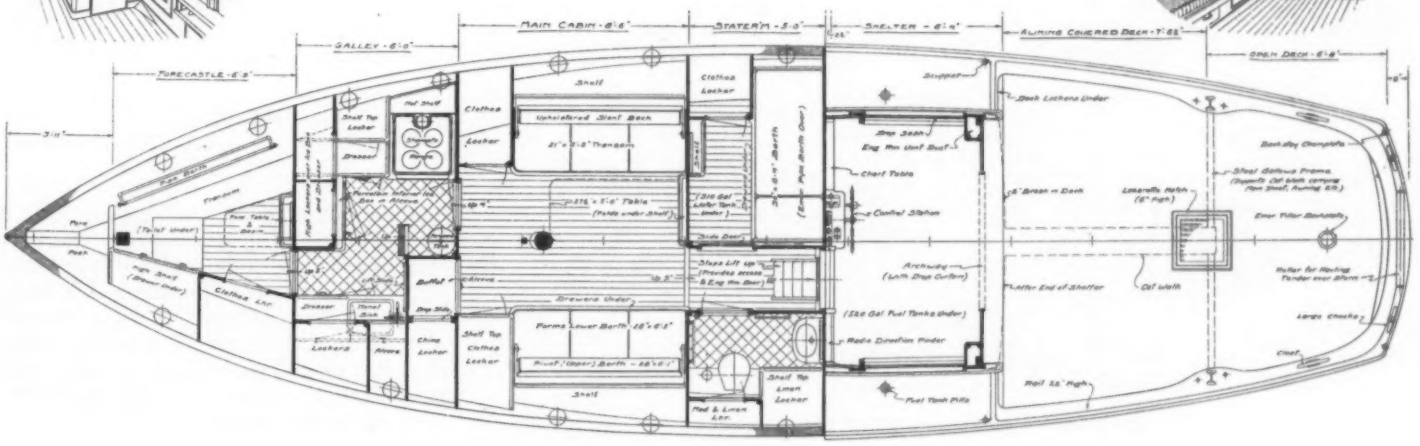


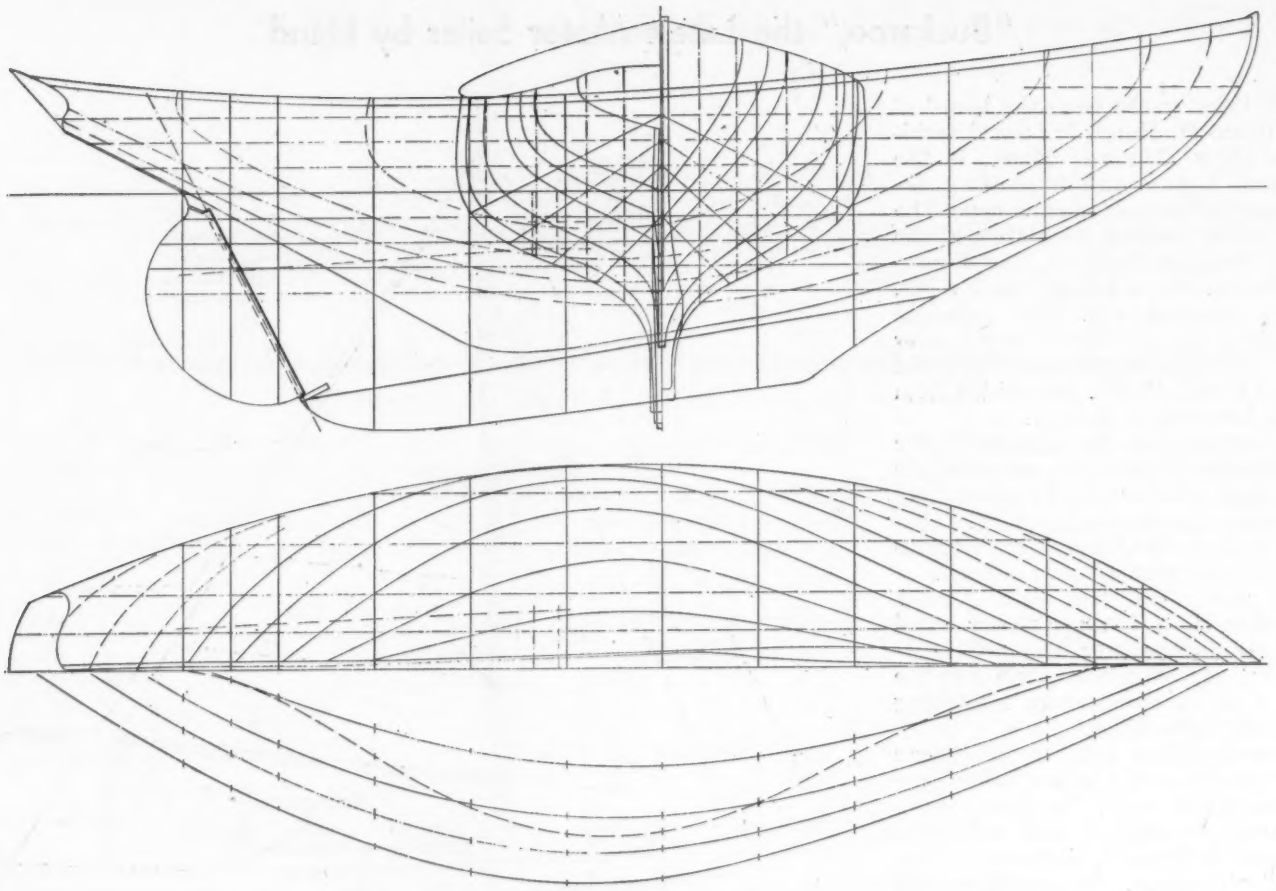
GALLEY
(FORD. STAR CORNER)

The accommodation plan shows an interesting layout and the small perspective drawings illustrate attractive details

MAIN CABIN
(FORD. PORT CORNER)







The lines of this cutter show a fairly hard bilge, good depth, and lots of lateral plane

A 25-Foot Auxiliary Cutter

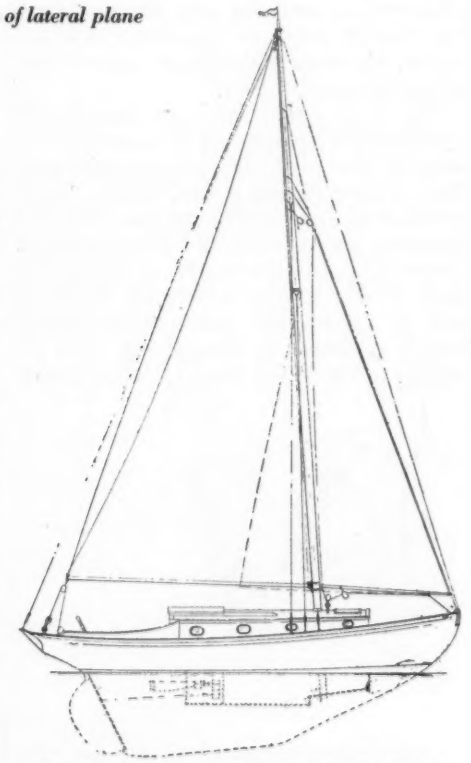
THE plans of the auxiliary cutter shown herewith are from the board of C. Padgett Hodson, naval architect of Philadelphia. The boat was designed for M. Livingstone, a western client who desired a weatherly small boat which would be easily handled and would have accommodations for two people.

The principal dimensions of the new cutter are as follows: length over all, 25′ 0½″; length on water line, 19′ 3″; beam, extreme, 8′ 3″; draft, 4′ 9″. Construction is fairly heavy, with sawn frames spaced 27″ center to center, two steamed and bent frames being worked between each pair of sawn timbers.

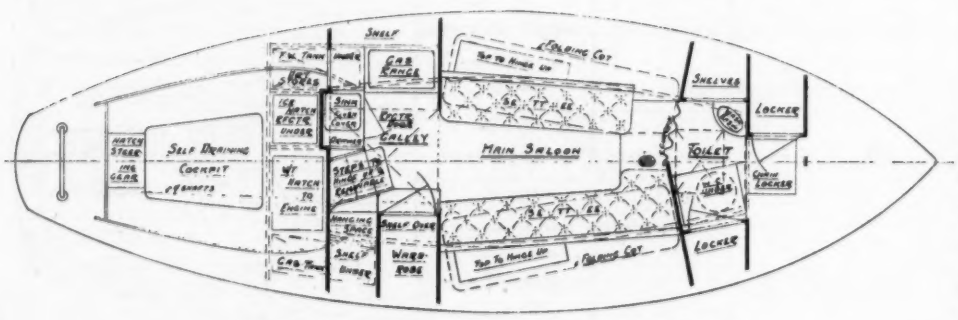
The motive power is a Gray Light Four with 2:1 reduction gear. It is installed under the bridge deck with the flywheel aft and it drives through a Morse transmission forward. This method of installation allows the engine to be placed higher in the boat than usual, thus making it easily accessible. It also gives a low shaft line without much pitch to it. Valuable space in the galley is also saved.

The lines show a powerful section with fairly hard bilge, quite sharp forward and with plenty of flat surface below the rabbet line. The rig is moderate, with single jib and a permanent backstay. The cabin trunk is low and the cockpit fairly roomy.

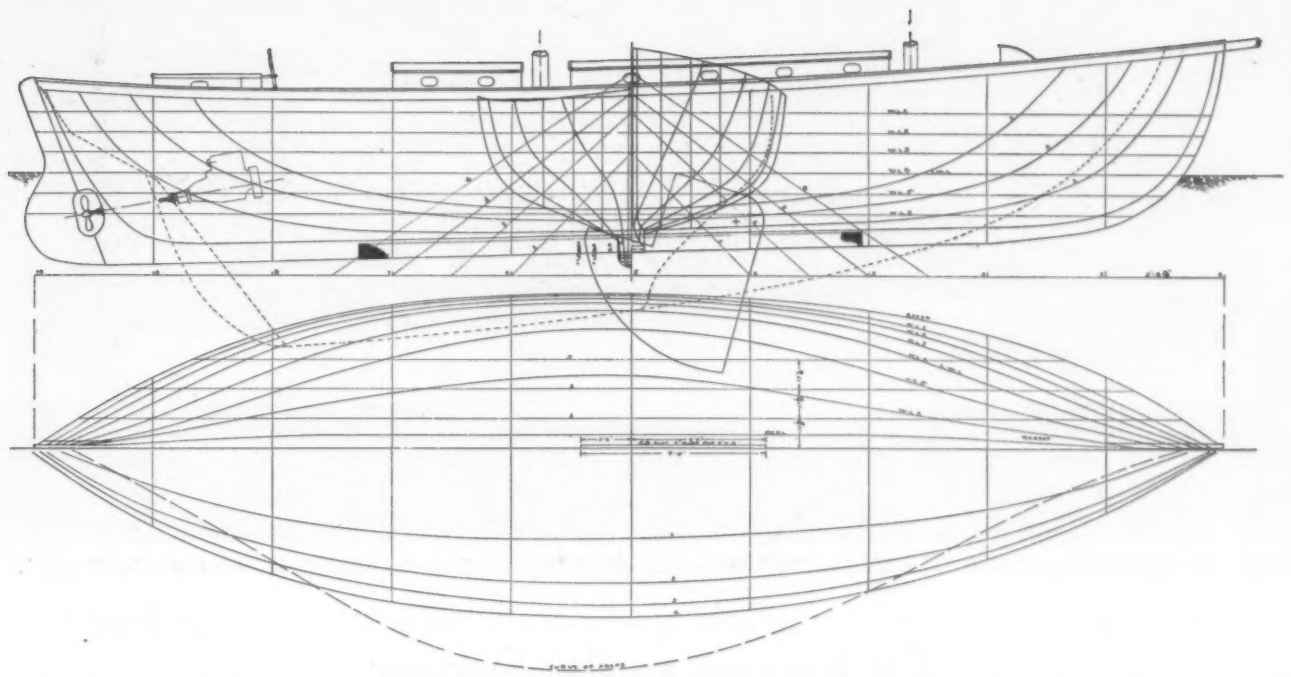
The layout of the quarters below differs from the conventional arrangement in some respects. Forward is a toilet room, separated from the cabin by bulkheads and a curtain. The main cabin, with more than 5′ 3″ headroom, has a cushioned seat each side with a full length folding berth over. Blankets and bedding will be stowed outboard of these during the daytime. A folding table will be fitted against the mast and may be swung up out of the way when not in use. The galley is aft, and gasoline and water tanks are under the deck each side outboard.



The rig is moderate and the sail is all inboard



The cabin plan is a bit unconventional but is worth study

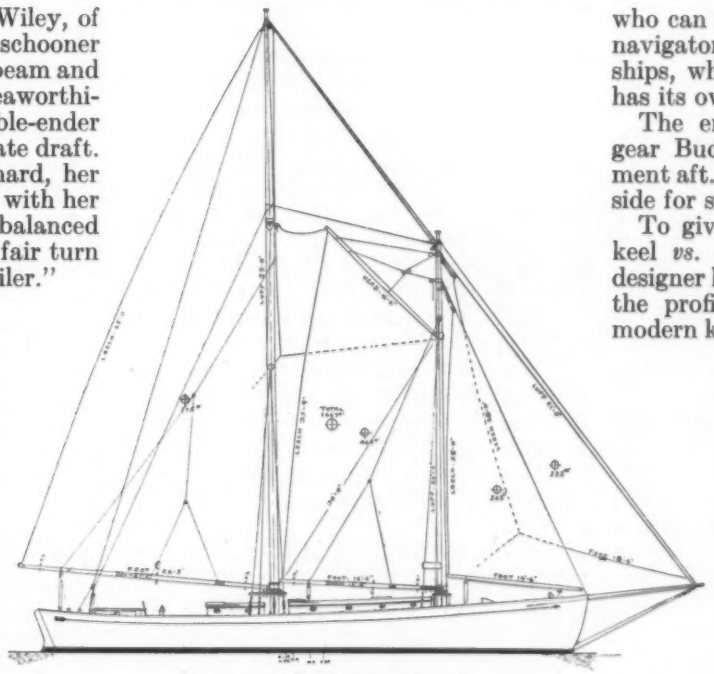


The dotted line shows profile and section of a conventional keel hull of the same weight and cost

A Shoal Draft Cruising Schooner

DESIGNED by Ralph H. Wiley, of Oxford, Maryland, this schooner is 58′ over all, 54′ 3″ l.w.l., 15′ beam and 4′ 6″ draft. She combines the seaworthiness and roominess of the double-ender with the convenience of moderate draft. Though her bilges are fairly hard, her fore and aft lines are easy and, with her long, straight keel and well balanced water lines, she should have a fair turn of speed and also be a "self-sailer."

The bugeye stern gives plenty of lateral plane aft and permits locating the centerboard where it does not cut through the middle of the best cabin space. The board, deep and short, should be effective, giving a good deal of area when all the way down. The rig is moderate but is well inboard and gives ample canvas for the displacement. Neither mast, by the way, passes through a deckhouse. Stability is assured by the liberal beam and also by 7½ tons of ballast on the keel.

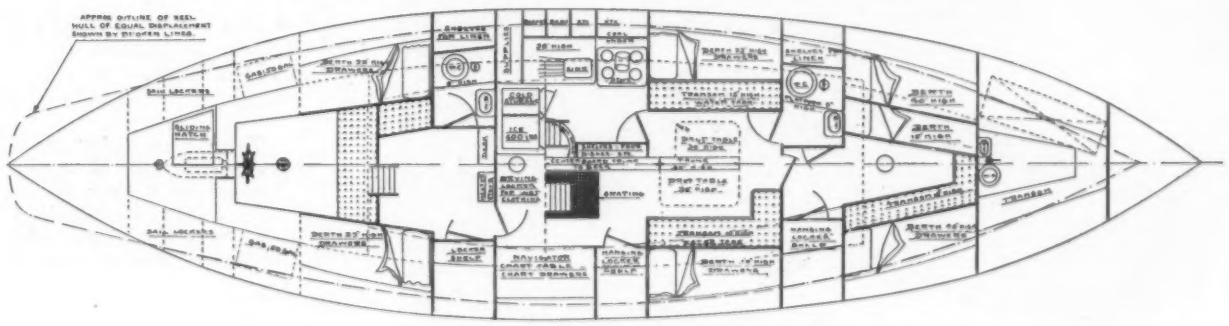


The rig is long on the base, and low

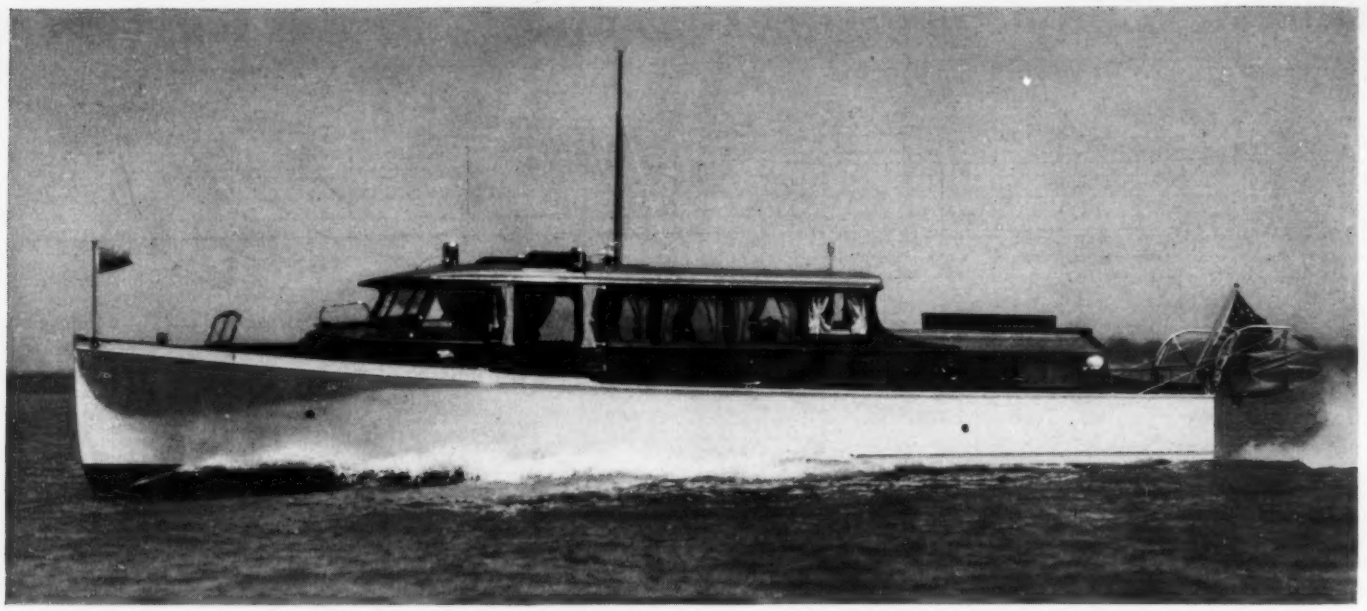
Full headroom is provided below, even in the crew's quarters. The forward stateroom and the after cabin provide sleeping quarters for the watch below, who can "caulk it off" undisturbed by navigator or cook. The galley, amidships, where there is the least motion, has its own companionway.

The engine, a 6-cylinder reduction gear Buda, is in a separate compartment aft. Ventilated bins are fitted each side for stowing sails.

To give a new slant on the ancient keel *vs.* centerboard controversy, the designer has sketched in, in dotted lines, the profile and midship section of a modern keel yacht of the same displacement (and probable cost) as the double-ender. This is an interesting comparison, in which the light draft center-boarder shows a decided advantage in usable space below. It is reasonable to suppose that, with her longer water line, she could make things interesting for the deeper boat under sail, particularly off the wind when lifting her board would reduce her wetted surface materially. In a double-ender like this boat, with her deep "heel," the engine may be placed well aft.



Accommodation plan, with a conventional boat dotted in for comparison



R. H. Norton, of Chicago, owns this new Matthews "46" day cruiser. Two 90–110 hp. Kermath engines give her a top speed of 18 m.p.h.

Of Interest to the Skipper

Two Valuable Pamphlets

TWO bulletins have recently been issued by Fairbanks, Morse & Co., of Chicago. One covers the Model 36 4-cycle marine Diesel engines which are built in two cylinder sizes, 4¼″ by 6″, rated at 10 hp. per cylinder, and 5½″ by 7″, rated at 20 hp. to the cylinder, both at 1,200 r.p.m. The smaller size is available in 1, 2, 3, 4 and 6 cylinder units and the larger one in 4, 6 and 8 cylinder combinations, thus furnishing engines in a power range from 10 to 160 hp.

The bulletin describes and illustrates the engines of this model, giving specifications, general data and installation diagrams. Model 36-A also lends itself to use driving direct or alternating generating sets.

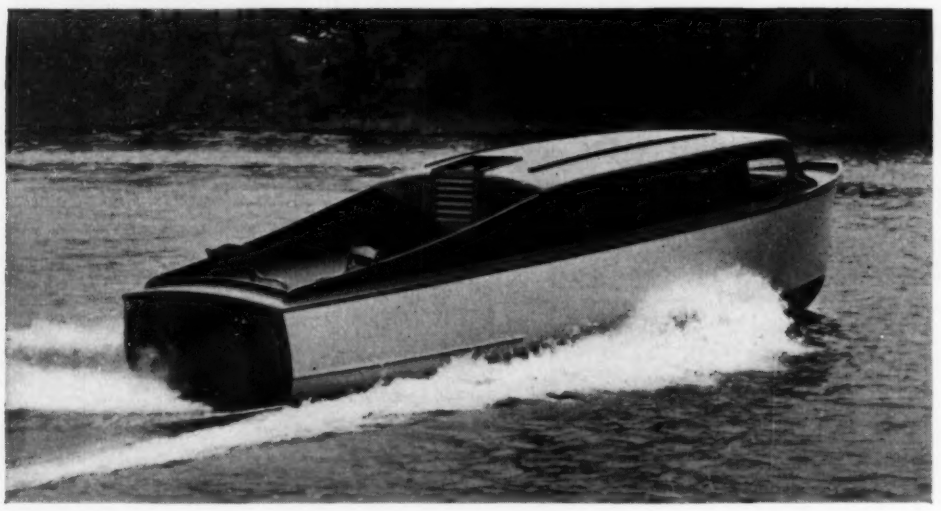
The other bulletin, 3500-E, concerns Model 35-E, the manufacturers' latest design of 2-cycle marine Diesel. This is a full Diesel direct injection engine. Air is compressed in the base and admitted to the cylinders through ports in the cylinder walls which are uncovered by the piston. The entering air is so directed as to scavenge the cylinder thoroughly, leaving a charge of fresh air to be compressed on the up stroke of the piston. The fuel is injected within a few degrees of the top dead center. Ignition then takes place and the piston passes the center and begins the working stroke. When the piston has traveled down to about fifty degrees ahead of the bottom center, the ports are uncovered and the scavenging air is admitted. Ports and cylinder head and the top of the piston are shaped to direct the entering air so that scavenging is thorough.

The number of moving parts is kept to a minimum, being only the pistons, rods, crankshaft, injection pumps, lubricating oil circulating pumps, fuel oil supply pumps, flywheel and governor. The 2-cycle principle eliminates both intake and exhaust valves and their attendant mechanism.

Control of the engine is centered in a compact and accessible unit which houses the fuel injection pumps, the air starting and reversing mechanism, and the governor. A remote control device provides for direct control of the engine from the helmsman's position.

The engines are built in four sizes. The smallest is 8¾″ by 10½″, 3 to 6 cylinders, rated 25 hp. per cylinder at 400 r.p.m. The 10″ by 12½″ is rated 35 hp. per cylinder at 360 r.p.m. and is built in 4 to 6 cylinder units. The 14″ by 17″, 70 hp. per cylinder at 300 r.p.m., is built in 4 to 6 cylinder models. There is also a 12″ by 15″ model.

These engines are tested by the American Bureau of Shipping and approved for marine use.



The Owens 28-foot sedan steps along at 18 m.p.h., driven by a Gray Six-75 engine. The sweeping lines of house and coaming give her a "modern" look

+ + +

Bull Dogs as a One-Design Class

Members of the American Yacht Club, of Rye, N. Y., have bought seven boats of the Bull Dog model and are to race them as a one-design class. They will be known as the A.Y.C. "A" Class and have before them a strenuous season. The older members of the club will race them three times a week and the juniors on other days. Among the owners are J. B. Shethar, Ralph Manny, George Smith, Everett Horgan and Herman Nichols. It is hoped that, before the summer is over, there will be enough of these smart little racers at other Sound ports to furnish inter-club racing. At present there is one boat at Oyster Bay, one at Indian Harbor, and three at Mamaroneck.

The Bull Dog was designed by Megargel & Gruber, Inc., now associated with Donaldson & Co., and built by T. A. Kyle, Inc., of City Island, N. Y. The boat is 14′ over all, 11′ 6″ l.w.l., 5′ 3″ beam and 2′ 5″ draft. She carries 110 square feet of sail and has 450 pounds of lead on the keel. Air tanks forward and aft insure that she will float on an even keel if she gets full of water.

A Bull Dog was recently sold as a sailing tender for the Diesel yacht *Camargo*, owned by Julius Fleischman.

LOS ANGELES—A *Champion-equipped stock Hudson Sedan set 35 new stock car records in a punishing day and night run at Muroc Dry Lake. Not a single spark plug was replaced in the thousands of miles of record-smashing speed in desert heat.*

NEW ROCHELLE, N. Y.—*Joel Thorne, who won the Townsend Medal, emblematic of the National High Point Outboard Championship and the Champion Spark Plug High Point Trophy, Eastern division, uses Champions exclusively.*

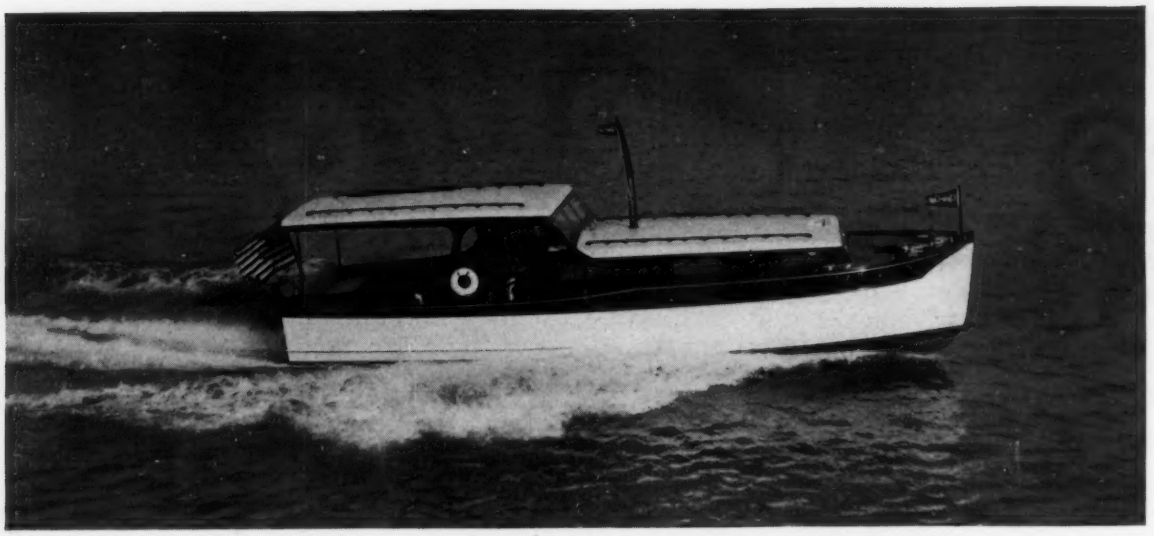
CALIFORNIA—*William Larzelere, 17 year old outboard pilot, captured the Northern California and Pacific Coast amateur Class A Championship. Larzelere used Champions exclusively in his spectacular climb to outboard racing fame.*

BRIARCLIFF, N. Y.—*15,000 enthusiastic spectators saw Langdon C. Quimby in his Champion-equipped Willys 77, win what is believed to be the first strictly amateur road race held in this country. In the race were several European-made cars.*

After all, it is remarkably easy to understand the vital importance of spark plugs to engine economy and engine performance. In boats, as in motor cars, the world's choice is Champions because they have demonstrated their better performance over and over. The racing champions on land and water turn to Champions. They have helped to win the world's major racing events for eleven straight years. Millions of motorists and boat owners over the world make Champions their first choice and thereby confer on Champions a world leadership that continues into their 25th year.

NRA CODE A1'EM 34-01

KEEP YOUR ENGINES YOUNG • TEST AND CHANGE SPARK PLUGS AT REGULAR INTERVALS



The new 38-foot Chris-Craft "Individualized Cruiser" built for C. M. Ketcham of Chicago. She has a double stateroom forward, main cabin, galley and toilet room

Additional "Mail Ports"

Last fall the Texas Company inaugurated a system of "Mail Ports," selected Texaco distributing points placed at the disposal of cruising yachtsmen for use as mailing addresses. The large volume of mail handled by these stations along the Inside Route to Florida during the six months of their existence, and the comments of yachtsmen, have convinced the company that such a service is of value. Additional "Mail Ports" are being provided. Already many new ones have been added between New York and Florida and the new program provides for them at intervals along the Atlantic Coast from New York to Maine, on the Hudson River, Lake Champlain, the St. Lawrence, the Great Lakes and the entire Gulf Coast.

A convenient pocket size booklet listing the addresses and telephone numbers of all the Texaco "Mail Ports," with a complete description of the service, may be obtained by writing to Texaco Waterways Service, 135 East 42d St., New York.

Following is a list of the Texaco Cruising Charts now available:

1. Atlantic Coast — Eastport, Me., to Cape May, N. J.
2. Atlantic Coast — Philadelphia, Pa., to Savannah, Ga.
3. Atlantic Coast — Charleston, S. C., to Key West, Fla.
4. Hudson River, Lake Champlain, and New York Canals.
5. Great Lakes and adjoining waterways — Illinois Waterway System.

\+ + +

Gar Wood Boats at Chicago

At the recent Motor Boat Show in Chicago, Gar Wood, Inc., of Marysville, Mich., exhibited seven boats, ranging from the 16–35 runabout to the 28–40 runabout and the 26-foot streamline cruiser. It is reported that, though there was pronounced interest shown in all the models, three of them seemed to attract most attention. These were all new, 1935 craft, the 26-foot cabin cruiser, the 20-foot de luxe utility, and the 22-foot runabout.

Though no changes have been made in hull, cabin or general specifications of the 26-foot streamline cruiser since she was first shown at New York last January, there have been a number of refinements made in the appointments before construction was started on the orders received. These all add to the efficiency of the boat and to the comfort of the passengers.

The 20-foot de luxe utility boat made a hit at Chicago as did the 22–35 runabout. The latter is a new boat throughout and differs altogether from a previous model of the same designation.

\+ + +

Refinements Improve Scripps V-8

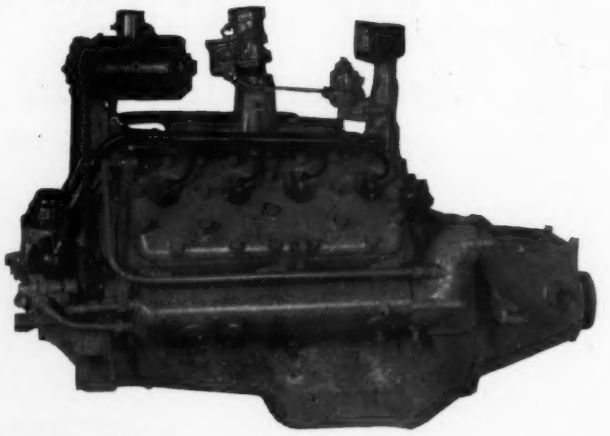
Since its presentation to the yachting public in January, the Scripps V-8 (a conversion of the Ford V-8) has undergone a number of improvements and refinements. These increase the efficiency of the engine without increasing its price.

The waterjacketed exhaust manifold extensions are now standard. These are elbow shaped and may be detached entirely or set horizontally, permitting a shipshape layout of the exhaust piping to conform to the conditions of the installation. The cooling water for these extensions is supplied through water overflow tubes which are also standard parts of the engine. A tapped boss in each extension elbow allows the water to be carried into the exhaust pipes.

Two bronze gear type water pumps are used to supply cooling water equally to both banks of cylinders and assure an equal flow of water into the exhaust pipes. They are fan belt driven and outboard ball bearings are provided to take the belt load off the packing glands. Both pumps are mounted low to reduce the lift and assure quick circulation, especially when the engine is idling. This should prevent any overheating of the cylinder heads through lack of water or through the formation of a steam pocket. The pumps themselves are stock patterns.

The carburetor, it will be noticed, is set at an angle. This is to compensate for the angle at which an engine is usually installed and to provide proper fuel economy without altering the float level. By using the Ford carburetor as standard equipment, it may be replaced or exchanged by any Ford dealer and is subject to the Ford service exchange policy.

Self-adjusting oil seals have been provided at the propeller thrust bearing cross shaft and on the crankshaft extension. This is important as oil is thus prevented from leaking into the flywheel housing and shorting the starting motor. A baffled breather tube is fitted on the cover plate of the reverse gear housing to allow for expansion and prevent pressure on the oil seals of the housing. Though this may be of minor importance, it shows the care regarding details exercised by Scripps engineers.



The latest model of the Scripps V-8 engine has been refined and improved since its first public showing in January, at the Motor Boat Show

Furniture for the Boatman

The 1935 catalog of the Gold Medal Folding Furniture Company, announcing its new line, should be of interest to every boat owner. In it are described and illustrated furniture in mahogany finish as well as in the more colorful combinations in this well-known line of space saving furniture. Gold Medal folding chairs have been in use afloat for years.

The company reports brisk business in yacht chairs as well as in its other furniture carried by dealers in marine supplies.

for Chris-Craft

Chris-Craft 25-ft. Streamlined Cruiser with berths for four, toilet compartment, electric lights, running water, stove, refrigerator, sink, galley—$1690.

New streamlined 30-ft. cruiser—2 staterooms, 6 berths, toilet compartment, running water, electric lights, stove, refrigerator, galley and complete equipment—$2790.

38-ft. Chris-Craft Individualized Cruisers built to order to meet owner requirements. 2 staterooms, large galley, toilet compartment, built-in lockers, built-in dresser and settee, double bed, dining nook which converts into additional double bed, complete equipment. Priced as low as $5650.

WORLD'S LARGEST BUILDERS OF MOTOR BOATS

CHRIS-CRAFT CORPORATION
406 Detroit Road, Algonac, Michigan

Please send details on all Chris-Craft models to:

Name _____

Address _____

City _____ *State* _____ (289)

★

Here's the Secret

of Season-long Varnish Coats

MORE AND MORE boat owners are learning how to avoid the chore of revarnishing masts, spars and natural wood hulls and bright work at the peak of the season. They have found out that by applying varnish which is correctly formulated with Bakelite Resin, they can keep varnished woodwork bright and glossy all season long without refinishing.

Next time your spars or bright work need revarnishing, scrape them down and apply this tough durable varnish. Actual service on yachts and commercial boats in all kinds of waters has demonstrated that Bakelite Resin Varnish has unusual resistance to salt air and water, sunlight, harbor fumes, wear and weather.

Leading marine coating manufacturers now supply Bakelite Resin Varnish, as well as Bakelite topside, boot-top, deck and cabin finishes of the same outstanding integrity. Write for Booklet 20S, "Bakelite Synthetic Resins", and learn about these high integrity finishes.

BAKELITE CORPORATION, 247 Park Avenue, New York
CHICAGO OFFICE, 43 East Ohio Street
BAKELITE CORPORATION OF CANADA, LTD., 163 Dufferin Street, Toronto

BAKELITE

"The registered trade marks shown above distinguish materials manufactured by Bakelite Corporation. Under the capital "B" in the symbol sign for infinity, or unlimited quantity. It symbolizes the infinite number of present and future uses of Bakelite Corporation's products"

SYNTHETIC RESINS

Books for the Yachtsman

Offshore Navigation in Its Simplest Form

By Alexander Forbes

(*Eastern Science Supply Co., Boston, $2.00*)

ONE of the difficulties that many yachtsmen have in taking up the study of navigation is that most books on the subject contain so much more than is actually needed by the average cruising man for finding his way about the ocean that they appear too formidable for the beginner. They offer so many different formulae that the novice becomes confused and does not know which are best suited to his particular needs, or those which he can postpone for future study.

Realizing this, Dr. Alexander Forbes, a yachtsman himself, and a member of the Cruising Club of America, has in this book, "Offshore Navigation," presented only one method for the beginner, and has reduced the subject to its very simplest form. His entire explanation of the methods he describes for finding position by the sun, moon or stars, is confined to but fourteen pages of text. After telling how to obtain a meridian altitude sight for latitude, he confines himself to a description of the Littlehales method for obtaining a line, or lines of position, and has reduced this to the simplest possible terms. In this he has been wise. There is nothing in the practice of navigation that anyone who can add, subtract and use tables need fear. The mathematical work has all been done for him by others and is reduced to tabular form. All that is required is to know how to make use of these tables and to learn to handle a sextant. And the latter, after some experience, is not difficult.

Being a yachtsman, and knowing the handicaps of space and lack of facilities for working below deck on a small boat, the author has also reduced the number of tables to be used (and carried) to a minimum. As most of the average American yachtsman's cruising is done in summer and between 32° and 45° of north latitude, he has incorporated in this book of only 123 pages all the tables necessary for working sights between these limits while the sun is north of the equator. Thus, with this small volume and a nautical almanac, one can find his way anywhere in the waters in which he normally cruises during the yachting season. This itself is of no small advantage. If one wishes to cruise in other latitudes or seasons, all he needs is to obtain the other portion of the tables, to be found in H.O. 203 or H.O. 204.

Dr. Forbes' book seems the answer to those who want to learn "the art of coming and going" in its simplest form.

+ + +

Lloyd's Register of American Yachts

(*Lloyd's Register of Shipping, New York, $12.00 and $14.00*)

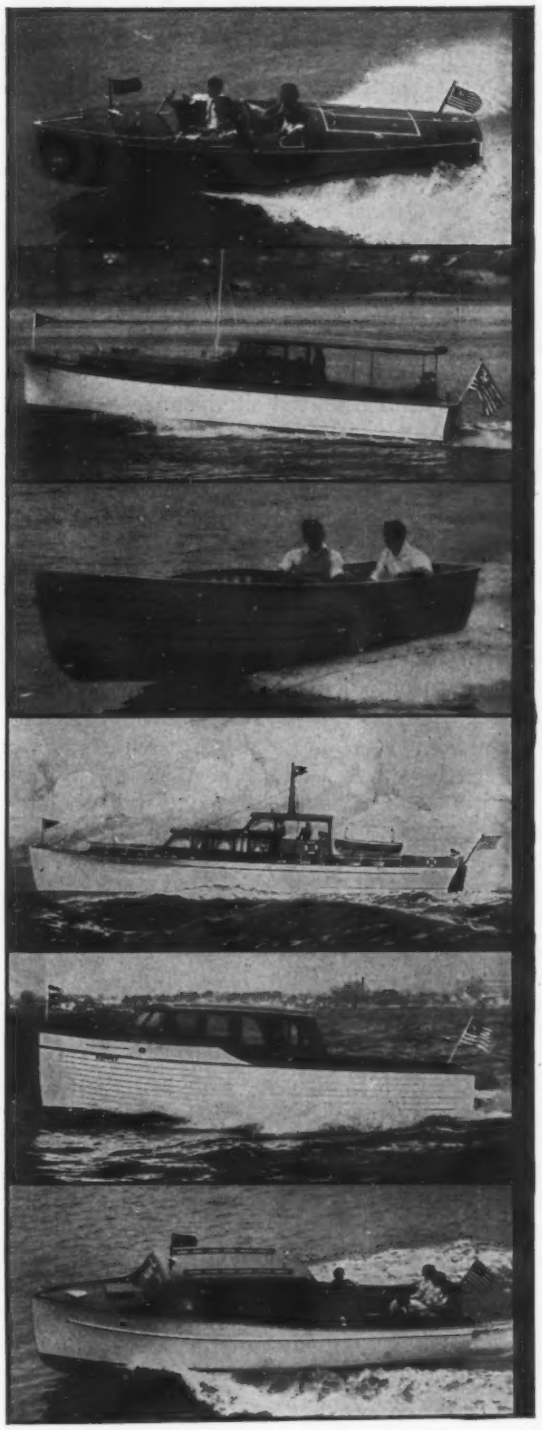
"LLOYD'S Register of American Yachts" for 1935 marks the 33rd year of this publication, a longer life than any of its many predecessors since Edward Fox published the first American register, "Fox's Yachting Annual," in 1872. It is a long way from the present "Lloyd's" with its 600 pages and 5505 listed yachts back to the little blue book originally published, hardly more than a pamphlet, listing 400 yachts and 24 yacht clubs. About all that they have in common is the same blue cloth cover and the advertisement of Annin & Co., flagmakers. The three old yachts still listed in "Lloyd's," *America*, *Annie*, and *Viola*, though then in existence, did not appear in the old book. The most important yachts of that day were, on the one hand, such great schooners as *Sappho*, *Dauntless*, *Vesta* and *Henrietta* and the old sandbag racing sloops, *Bella*, better known as *Susie S.*, *Mary Emma*, *Sophia Emma*, *Gen. Tweed*, and *Addie Taylor*. The Hereshoffs were represented by a few small schooners and sloops, but for the rest the names of the modelers and builders of the day are unknown to the present generation — "Capt. Bob" Fish, "Pat" McGiehan, "Hen" Smedley, J. B. Van Deusen, Poillon Bros., David Kirby, and others equally renowned. At the time

Chosen by the LEADERS

THOSE WHO KNOW MARINE MOTORS BEST APPRECIATE KERMATH MOST!

After all—the fact that today 88% of the world's leading boat builders and yards endorse and install Kermath Marine Engines is mighty convincing proof that finer, more dependable, more economical marine power has yet to be found. We firmly believe you can count on a Kermath to deliver a much superior brand of performance in *your* boat at no additional cost. And besides—you have the most extensive series of motors ever built to choose from. Recent models of international leaders who use Kermath are illustrated below. Others will be featured from month to month. Your correspondence is invited.

KERMATH MFG. COMPANY, 5893 COMMONWEALTH AVE., DETROIT, MICH.



← The Chris-Craft Corporation of Algonac, Michigan are now building this popular 19 foot double cockpit runabout.

Hubert S. Johnson, → Inc., produce this 24½ foot deep sea fishing model at Bay Head, N. J.

← The Consolidated Shipbuilding Corporation of Morris Heights, N. Y., offer this 39 foot Play Boat.

Owens Yachts of An- → napolis, Maryland, supply this sedan cruiser in a 28 foot design.

← Seaman Sea Skiffs, built in Long Branch, N. J., offer this 16 foot Sport Skiff for offshore fishing.

The Baltzer Boat → Company of Medford, Mass., have produced this Jonesport 28 foot cruiser.

← A 65 foot triple cabin cruiser designed and built by the John L. Hacker Co. of Detroit.

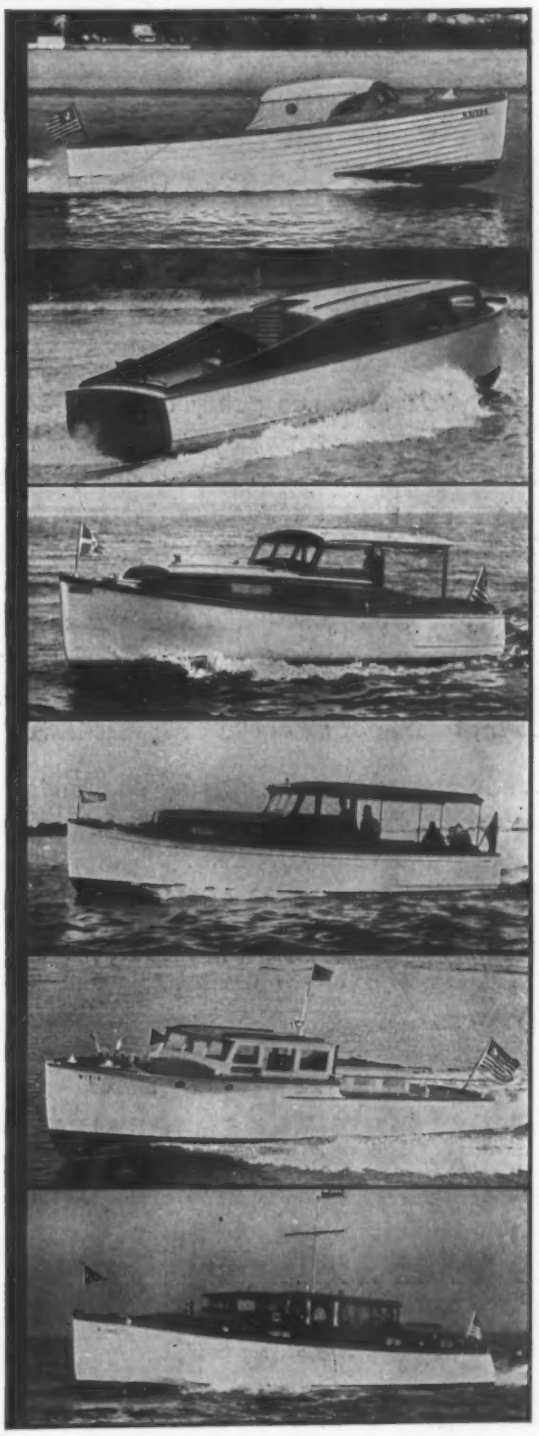
A 32 foot single cabin → Richardson Boat Co. cruiser built in N. Tonawanda, N. Y.

← Wheeler Shipyard, Inc. of Brooklyn, N. Y., are producing this 28 foot streamline sedan cruiser.

Huckins Yacht Corp. → builds this 38 foot Offshore Cruiser in Jacksonville, Fla.

← The Chris-Craft Corporation of Algonac are responsible for this 25 foot Chris-Craft Cruiser.

The Matthews Com- → pany offer this double cabin "46" as one of their fleet of cruisers built in Port Clinton, Ohio.

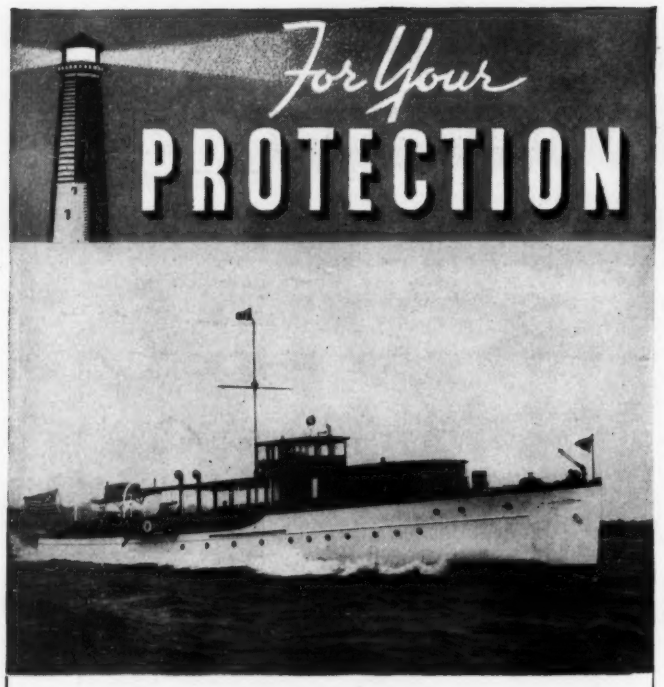


MOTORS ON DISPLAY
Boston, Mass...1043 Commonwealth Ave.
New York City.....Fifth Ave. at 15th St.

KERMATH
A Kermath Always Runs

MOTORS ON DISPLAY
Toronto, Ont., Can.....619 King St., W.
Miami, Fla.....234 S. W. Sixth St.

2 TO 12 CYLINDERS . . . 8 TO 450 HORSEPOWER



NO yacht insurance policy affords greater protection for yacht owners than that issued by ATLANTIC. Atlantic non-assessable policies, issued at standard market rates, not only provide the broadest coverage available but afford unexcelled security as well. This Company, one of the oldest and strongest mutual marine insurance companies in the world, has a surplus of more than $9,000,000. and a 93-year record of prompt and equitable loss settlement.

Atlantic insurance is decidedly economical. Present cash dividend return to policyholders is 15%, payable whether or not the individual policyholder has a loss.

Atlantic pays commission to brokers in the same manner as other responsible companies.

ATLANTIC
MUTUAL INSURANCE COMPANY
CHARTERED 1842

HOME OFFICE: Atlantic Bldg., 49 Wall St., N. Y.
BRANCH OFFICES: Baltimore, Boston, Chicago
Cleveland, Philadelphia

ATLANTIC MUTUAL INSURANCE CO.
49 Wall Street, New York
Please send me a copy of your free booklet "Facts" regarding your mutual plan of insurance. (Check booklet desired.)
☐YACHTS ☐JEWELRY and FINE ARTS
NAME.....
ADDRESS.....
CITY..... STATE.....

MAIL COUPON OR CONSULT YOUR BROKER

James Gordon Bennett was commodore of the New York Yacht Club, A. Cary Smith was measurer, the Seawanhaka Yacht Club had entered its second year, and Edward Burgess was commodore of the young Beverly Yacht Club. There were entered nine "screw steamers," and the gasoline and Diesel engines were still dormant in the remote future of the next century.

The 300 yachts added in the 1935 "Lloyd's" show little of note, no new "Cup Defenders" as last year, the only notable racing yachts being two for the Twelve-Metre Class, *Seven Seas*, designed by Clinton H. Crane for Van S. Merle-Smith, and *Mitena*, designed by L. Francis Herreshoff for W. J. Strawbridge, recent owner of *Istalena*.

The new additions to the Register include a number of cruising schooners, cutters, ketches and yawls, wholesome craft of modern design, justifying the recent changes in the cruising rules. The power division is made up of cruising craft in many sizes but mainly of the smaller boats for family use.

The book contains the usual lists of yacht clubs, yacht owners and the plates of private signals and club burgees, the latter being also issued separately in "Lloyd's American Yacht Flags."

\+ + +

Sails Over Ice

By Captain "Bob" Bartlett

(*Charles Scribner's Sons, New York, $3.00*)

THE impression of essential significance garnered from these pages of close-packed adventure and excitement is the singularly satisfying relationship that can exist between a man and his ship. Both the trim little *Effie M. Morrissey* and her well-beloved owner and skipper, Captain "Bob" Bartlett, are known wherever sailormen abide, but this chronicle of their experiences on the edge of death and disaster will win new friends and fresh acclaim for the gallant pair.

Built forty years ago in a famous Massachusetts shipyard, the *Morrissey* is a product of the old-time inspired workmanship that amounted to actual genius. Since acquired by her present owner in 1925, she has been the means of nine trips to the Arctic — a sufficient testimonial, it seems, of her unusual worth.

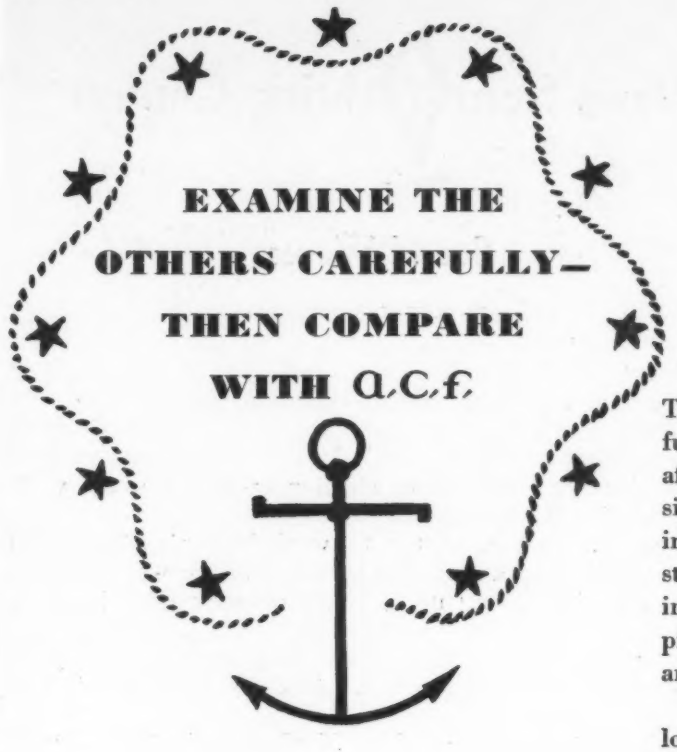
Nobody goes into even the North Atlantic without running a few risks, without meeting at least one hair-raising adventure. The *Morrissey's* visits to the Labrador, to North Greenland, the Strait of Fury and Hecla, and other parts of the far north, were no exception to this rule. Time and again, she was on the point of being stove in by growlers; once, among the Aleutian Islands, her propeller shaft was broken in the sleeve; again, with her propeller fouled by plankton nets, she was jammed in an ice field and "her fate was on the laps of the gods." But the capricious gods were never anything but favorable and the *Morrissey* always came through.

Most of these expeditions were made in the interests of science and, over a period of ten years, several museums have benefitted by the valuable specimens of animal, bird, and plant life gathered from Arctic lands and waters by Captain Bartlett and those accompanying him for that purpose. On an excursion to the northeast coast of Greenland in 1930, important archaeological and anthropological research was carried on in the so-called "Land of the Lost Eskimos."

The radiance suffusing the memory of a great man — Admiral Robert E. Peary — whom Captain Bartlett loved and faithfully served, invests the story with added interest at several points. An instance is the story of the erection of the Peary Memorial at lofty Cape York, in the far North. This was an engineering feat of no small magnitude and the drama of its accomplishment and dedication furnishes a fitting climax to the author's experiences among the lands Peary also had roved.

Together, the *Morrissey* and her skipper contributed their part to this labor of love, and, as the latter states in conclusion and the reader hopes, "together we have much to do in the North yet. I pray that we may be able to do it together."

M. TODAHL



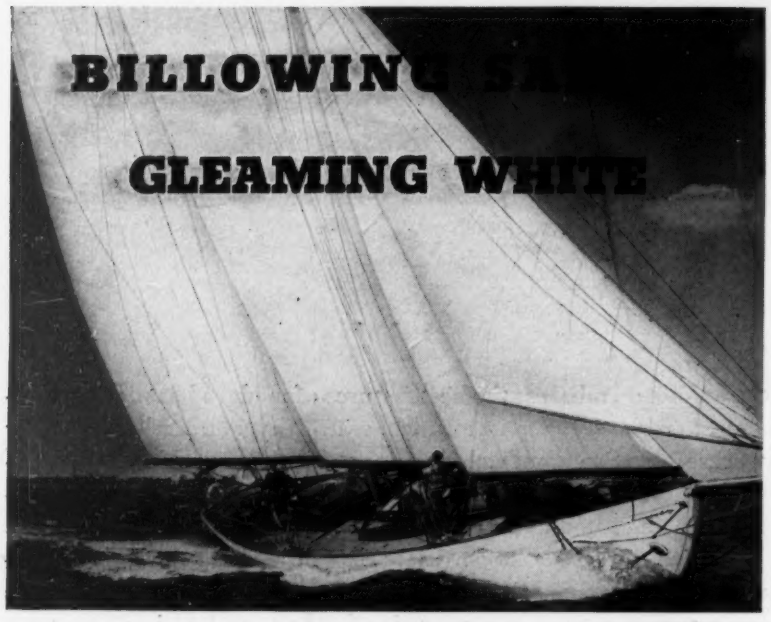
A.C.F.

This new A.C.F. 34-footer embraces the best features of modern boat design, carefully worked out to make it the most staunch, seaworthy, and livable 34-footer afloat. Study it carefully. See how the hull gains strength through A.C.F.'s exclusive system of shelf construction, where the bulkheads extend out to the planking and are notched and fitted and well-fastened to the shelves, so as to become strength members instead of merely partitions. Note the character of the planking: Oregon fir, straight-grained free of knots, rift sawn, and all strakes in one piece. Everdur bronze screws of generous size fasten the planking. The stern angle is of cast brass, and all fastenings throughout are of brass or bronze.

It is astonishingly roomy—plenty of cabin space, and a cockpit fourteen feet long. There are four full-length berths, capacious lockers and an extra-large hanging locker. The galley is airy and roomy, with three-burner stove, large ice box and sink. The bridge deck gives complete shelter to the helmsman's position, and a standing canopy covers all but the aft-third of the cockpit. In bad weather this is closed with canvas curtains fitted with a non-breakable "window." As an extra, the space under the canopy may be permanently enclosed in mahogany and glass. Despite its 9'6" beam, the A.C.F. "34" drives at 16 miles an hour with an engine of moderate size. For illustrated booklet, or for demonstration, write or telephone our Yacht Division, 30 Church Street, New York. Telephone Cortlandt 7-8100.

AMERICAN CAR AND FOUNDRY COMPANY

30 CHURCH STREET, NEW YORK, N.Y. • TELEPHONE CORTLANDT 7-8100



Capture this same beauty for your boat with

DULUX

FOR lasting beauty in all weather—all season long—Dulux Yacht White crosses the line a winner.

Du Pont developed this and other DULUX Marine Finishes especially for owners who take pride in keeping the fine appearance of their boats. All DULUX Finishes are quick-drying, exceptionally durable and economical. They have proved beyond doubt their greater resistance to salt spray and air, to discoloration from gases and fumes, to marring and scratching, to dirt collection, and other things that break down ordinary finishes.

Learn more about DULUX Marine Finishes from your Marine Supply dealer. Write for a free copy of a booklet, "There's a Letter Inside for You"—a boat owner's story of DULUX. Address E. I. du Pont de Nemours & Co., Inc., Finishes Div., Wilmington, Del.

New DU PONT
REG. U. S. PAT. OFF.
DULUX
REG. U. S. PAT. OFF.
MARINE FINISHES

News from Yachting Centers

Sound Waves

By LEE SCUPPERS

COME to think of it, this was supposed to be sort of an off year for the Long Island Sound Six-Metre fleet — no British-American Cup match, no Seawanhaka Cup challenge in prospect, no incentive to get out and race except for the fun of it. Yet the situation seems to be shaping up into a worth while season, refuting the prognosticators.

Herman F. Whiton, of the Seawanhaka-Corinthian Yacht Club, the only Stars and Stripes standard bearer who ever won the Scandinavian Gold Cup, is going overseas after it again. And while he is in Norway trying to pry the mug loose from those very good Scandinavian Six-Metre sailors, in all probability he will do something about a new international team race in this class.

It seems that Sven Salen, whose *Maybe* won the Gold Cup off Oyster Bay in 1927, the year after Whiton had brought it home with *Lanai*, would like to lead a team of four Norwegian, Swedish or Finnish (all right, Scandinavian) Six-Metres over here in September for a match on Long Island Sound with the top four American "Sixes." Sounds like a grand idea inasmuch as it might give our Six-Metre skippers something to do in the years when they were not occupied with their British rivals.

Incidentally, it ought to be more fun. It isn't much fun racing the British "Sixes" any more. Either they have slipped badly or we have improved tremendously, or maybe a little of both; anyhow they haven't won a race from us since Phil Roosevelt decided he was an old man full of pains and troubles.

Whiton is taking Bob Meyer's *Bob-Kat II* over to Norway for the Gold Cup series. A good boat that, particularly in moderate to heavy going. She was on the spotless United States British-American Cup teams in 1932 and 1934 and ran away with the Seawanhaka Cup defense last October.

* * *

The Alden Class A dinghy sailors from Essex seem to have made the struggle for the Mrs. James F. Baldwin Trophy a private fight. The wife of the North American Dinghy Association commodore offered the prize for the best total point score made in the Essex fall and spring regattas, the Larchmont and New London meets. Mrs. Helen Hill, of Larchmont and Essex, missed one of these regattas but topped the list with 388 points in her *Fanny Dunker II*. Walter Rowe's *Liza* was second with 384, Curt Alvord's *Tadpole* third with 362, Ben Harrison's *Ker Choo* fourth with 338, and Al Erdman's *Twinkle* fifth with 330.

* * *

Manhasset Bay, stronghold of the Frostbite Yacht Club and upholder of the best traditions of that noble aggregation of winter dinghy sailing addicts, brought its championship season to a close with a dinner at the Manhasset Bay Yacht Club a couple of weeks ago. Bob Wessmann, the demon amateur photographer who became a dinghy convert last fall, won the season's honors in Class A with his venerable Ollendorf dink, *Blizzard*. He had a five-point margin on another newcomer, Gabriel Giannini, who sailed *Fiammetta*, a Ratsey pram. In Class B, Egbert Moxham, Jr., prevailed with his one-design dink *Stingaree II*. He had a twenty-point advantage over Ted Clark's old but agile flier, *Eskimo III*. Clark won three of the five monthly series, but a late start in November and several weeks of mid-season experimentation with different rigs and mast positions kept him from seriously annoying the commodore's son.

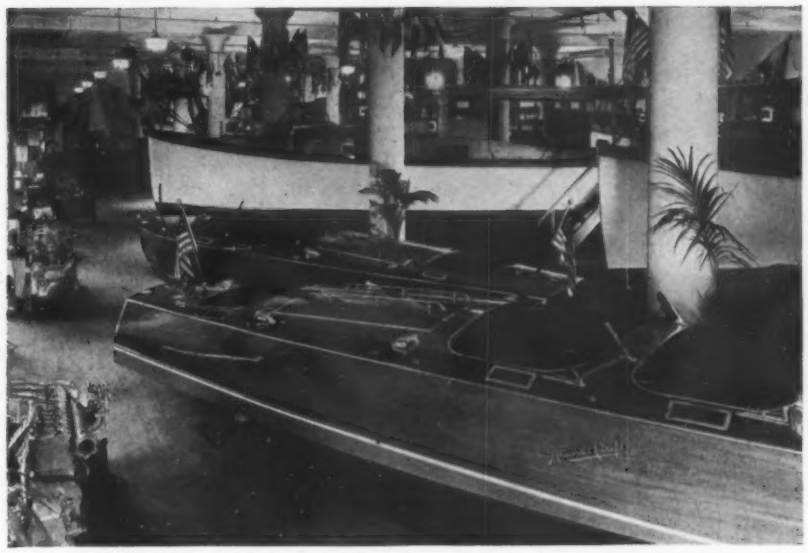
HURRY SAILOR!

PROMPT DELIVERY

IS STILL POSSIBLE ON CERTAIN SIZE AND TYPE BOATS WHICH YOU CAN SELECT FROM OUR DISPLAY

CALL AT ONCE TO SEE THEM

Runabouts
Open Sailboats
Dinghys
Canoes
Outboards
Marine Engines



New Cruisers
Cabin Sailboats
Mahogany Speedboats
Rowboats
Fishing Skiffs

LET US KNOW YOUR REQUIREMENTS

Telephone ALGonquin—4-0800

WORLD'S LARGEST PERMANENT BOAT SHOW

BARGAINS AVAILABLE IN NEW AND USED ENGINES AND BOATS

BRUNS, KIMBALL & CO. • FIFTH AVENUE AND 15TH STREET NEW YORK CITY

RITCHIE GLOBE "UNDERLIT" COMPASS

MOST ACCURATE, STEADY AND POWERFUL COMPASS MANUFACTURED TODAY

Contains new dynamic card and magnetic float system, insuring stability under all weather and sea conditions at high speed.

Dome top magnifying glass makes for greater visibility

E. S. RITCHIE & SONS

Established 1850

110 CYPRESS ST. BOSTON, MASS.

AUXILIARY SLOOP

L.O.A. 32'; BEAM 9' 6"
L.W.L. 27' 8"; DRAFT 5' 4"

Smart Auxiliary Cruiser

Accommodations for four. Full headroom. Bronze screw fastened. Philippine mahogany planking. 20 H.P. Universal engine. GRIFFIN sails.

Designed by JOHN W. LANE

Now Under Construction in New York for Summer Delivery

Delivered afloat, New York City—$3950.00

CHRIS. B. NELSON, INC.

Naval Architects and Yacht Brokers

110 East 42nd St. New York, N. Y.

The long quiescent Hudson River Yachting Association, which used to govern sailing and motor boating on New York's Father of Waters, has been given a couple of shots of adrenalin and is likely to come back to life this summer. Lieutenant K. F. Hertford, of West Point, is temporary chairman of the group attempting the resuscitation, and James A. Cruikshank, of the Hudson Highlands Country Club, temporary secretary. Those behind the movement hope to get the Hudson River clubs interested in building a fleet of Moons, a one-design, cheap-to-build, centerboard knockabout that is popular in Southern California.

+ + +

Just because he has turned *Bob-Kat II* over to Whiton for the invasion of Norway, it doesn't mean that Bob Meyer is going to remain on the beach. He is going cruising, having chartered *Dorade* from Olin Stephens. "Teddy" Alker, one of Manhasset's veteran skippers, is going to take a summer off from serious racing. He has chartered his Interclub, *Opal II*, to Gilbert Ottley, of Glen Cove, who used to sail the Ten-Metre *Falcon*.

+ + +

The Interclub Class has half a dozen new owners this season and hopes to have twenty-four of the twenty-six boats in this group racing this season. Nineteen of them already have been fitted with the new rig designed by Billy Luders and there is a chance that two or three more will make the change soon.

+ + +

Cornell University has gone in for yachting in a big way. The Ithacans organized the Cornell Corinthian Yacht Club, elected Jesse A. B. Smith, Jr., Stamford's junior instructor, commodore, and then instituted a raid on Sound dinghy ports that resulted in the formation of a sizeable fleet of Class A boats on storied Lake Cayuga. The Cornellians took Ed Seeley's *Lady Lu* from Stamford and three boats from Manhasset, Bob Wessmann's *Blizzard*, Bob Salto's *Frozen Asset* and Jimmy Moxham's *Walrus*.

Larchmont, under its new commodore, "Rudy" Schaefer, who was elevated to the job when Harry Maxwell resigned, is going into formal commission on June 8th. To help make the occasion a gala one, Manhasset and Larchmont have swapped their Y.R.A. dates. Larchmont is taking June 8th and Manhasset will run its first Sound regatta on the 15th.

+ + +

The Intercollegiate Y.R.A., presided over by Bill Cox of Princeton, a former Sears Bowl winner, will conduct its annual championships on June 11th, 12th and 13th. When this was written, the collegians had not decided on a site for their races, but the choice appeared to lie between Stamford and Manhasset Bay. The college yachtsmen are going to try something new this year. Each of the six member colleges will be represented by two crews, one sailing an Atlantic One-Design and the other an Interclub. Six races will be sailed, total points deciding the champion. At the end of the third race, the men who have been sailing the Interclubs will take over the Atlantics and vice versa. Heretofore, all the racing has been done in one class.

Along the Detroit River

DETROIT is expected to make a determined bid for the Gold Cup this summer with a boat nearing completion for Herbert Mendelssohn, whose Chris-Craft, *Madoshumi V*, has been flashing to victories in the runabout divisions of the President's Cup and Florida regattas. The new boat is highly streamlined and will be eligible for racing under the present Gold Cup rules, under the future rules, which allow blowers, and in the 12-Litre Class. She will be entered under the colors of the D.Y.C.

Detroit's most recent entrant, the late Aaron DeRoy's *Hornet*, which developed engine trouble last summer at Lake George just when it looked as though the Commodore was going to return the cup to Detroit, has been returned to the Dodge fleet. Detroiters

Here's a good steer for any old dear, from Bon Ami Chick the Sailor

"Always keep a package of Bon Ami (the famous household cleanser that 'hasn't scratched yet') aboard your boat."

You'll find that Bon Ami cleans and freshens paint in no time at all. It keeps the galley bright and spotless . . . shines brass and nickel until they fairly gleam! . . . keeps the lavatory sanitary . . . brings a crystal-clear sparkle to the windshield and windows.

Use Bon Ami in either *Cake* or *Powder* form and keep everything on your boat new-looking . . . and shipshape.

KEEP YOUR BOAT CLEAN WITH

BON AMI

The NEW VINYARD 40 foot CRUISER

TRIALS COMPLETED, SEA TESTED. READY FOR IMMEDIATE DELIVERY!

The newest addition to the famous Vinyard Cruiser fleet. Best construction and finest materials assure a rugged boat which can keep the sea and provide safety and comfort on the longest cruises. Sleeps six in owners quarters. Unusual deck and cabin space due to generous beam.

Length 40′ 0″, beam 11′ 6″, draft 3′ 0″. Oak frames, mahogany trim, planking 1⅛″ cedar. Bronze-screw fastened. Complete cruising equipment including dinghy and davits. Wide range of power plants offered.

Complete details supplied upon request. 40′—46′—50′—55′ models

VINYARD SHIPBUILDING COMPANY
MILFORD, DELAWARE, U.S.A.

She's in again!

And now come perfect days!

As sweet and trim as she is—a few more modern gadgets here and there will make her handier and more comfortable. Everything from an anchor to a masthead light is made by Wilcox-Crittenden, with modern fittings complete for all types of power and sail boats.

Get them now and enjoy the full season's use. Remember—the W-C Trade Mark says "They're DEPENDABLE."

Ask your dealer to show you these products, or send 25¢ for a copy of our catalog to study at your leisure.

An electric lighted, heavy gauge spun brass binnacle, beautifully polished. Dull black enamel finish inside. Made in five sizes, complete with compass. Compasses in mahogany boxes are also regular W-C Products.

Yacht blocks and fittings are made of special manganese bronze. Sheave turns freely on long-wearing, large diameter shoulder rivets, insuring long service. One of many W-C bronze or gal. iron blocks and pulleys.

WILCOX, CRITTENDEN
& COMPANY, INC.
MANUFACTURERS OF DEPENDABLE MARINE HARDWARE SINCE 1847
10 South Main Street, Middletown, Conn.

HAND-TRAP SHOOTING
the Sportiest Game Afloat

$3.50 BUYS THIS REMINGTON AUTOMATIC HAND TRAP

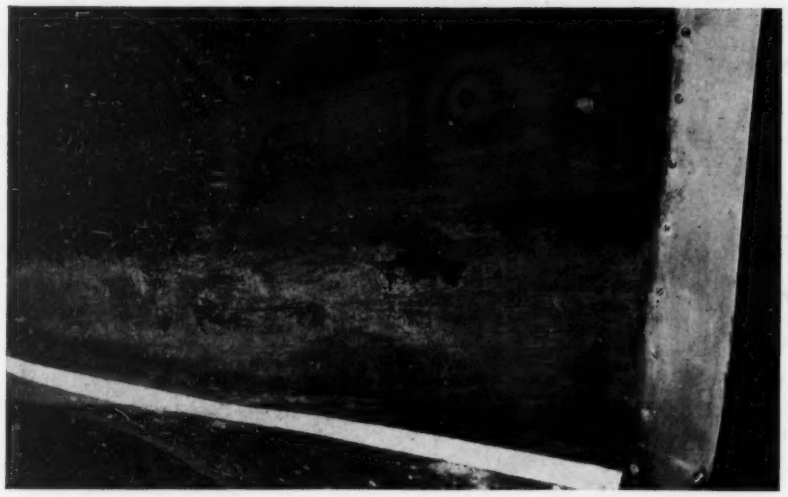
Light — only 1 lb. 2 oz. *Compact* — takes less room in bag than pair of shoes. *Easy in operation* — automatic spring action does all the hard work. *Sturdy* — walnut finished handle with non-slip grip; cadmium plated metal parts will not rust.

IT'S OPEN SEASON and no dull moments aboard the boat that sports a Remington Hand Trap. And there's no better space or time to get in trim for fall hunting or Skeet. Any member of the family can toss targets at the most difficult angles with this hand trap. And every member will enjoy showing his skill with a shotgun.

Trap is light, fast, automatic in action. And it will not rust — all metal parts are cadmium plated. At your dealer's . . . or write for full details. Remington Arms Co., Inc., 885 Barnum Avenue, Bridgeport, Connecticut.

Remington
DUPONT

Did YOUR BOAT..



look like THIS..

When You hauled her out last Fall?

With the ordinary FINISHES • life begins in the early Spring • and passes out *before* the Fall. Has that been *your* experience?

Here's a NEW FINISH for the NEW SEASON! • It is SPAROX • Clear • The Marine Coating Supreme! Something *more* than "just another finish."

A SPAROX finished boat brings you no headaches • no trouble • during the season. No necessity to lay up your boat for days for a re-finish job. There'll be *more* days of boating pleasure • less items of expense and labor!

SPAROX is a Brushing Finish, forming a rock-hard protective film on all marine brightwork • exterior or interior. It resists abrasion and wear, defies the elements • salt or fresh water • does not lose its natural high gloss, nor water-spot.

Apply two coats per day with SPAROX! It dries by evaporation • not oxidation • becoming stable, and unchanging. It is light straw colored, crystal clear, and darkens but slightly under the sun.

Make SPAROX this season's FINISH! In gallon, quart and pint containers • at your yard or the dealers. If not • from here!

● Ask for the NEW book about SPAROX.

SPAROX

●CLEAR●

THE MARINE COATING SUPREME

THE STANLEY CHEMICAL CO.

EAST BERLIN • CONNECTICUT

NEW YORK OFFICE • 100 LAFAYETTE ST.

Associated with • THE STANLEY WORKS, World's Largest Makers of Carpenters' Tools and Builders' Hardware

Have you taken up our challenge to the SPAROX panel test? We'll mail you a panel to take the hardest test you'll make!

The STANLEY CHEMICAL CO., East Berlin, Conn.

Gentlemen:

Send us one of your SPAROX coated panels. We will put it to test.

Name _____

Address _____

By _____

One of the five 28-foot one-designs, designed and built by Russell J. Pouliot, Inc., recently delivered to members of the Edison Boat Club of Detroit

were hoping that Mrs. DeRoy would carry on, but as the boat was damaged at the President's Cup regatta it was decided to discontinue the effort.

+ + +

The 54-foot yawl *Trident*, twice winner of the Port Huron-Mackinac Race, but which has been beaten out during the past two races on time allowance by Russ Alger's *Baccarat*, has been undergoing changes that will reduce her rating from over 34 to less than 30. The Booth-Shelden-Ford boat has been fitted out with a set of Dow metal spars, a suit of new sails with somewhat less area, and a lighter motor. The owners will have six weeks in which to try out the new rig before July 20th when the starting gun sounds for the big event.

Two cutters are to appear in the Lake Huron race this year for the first time. One is the 40-foot *Kid Sister* which was expected to be launched for the D.Y.C. regatta on Memorial Day, owned by Howard J. Lauhoff, of the Grosse Pointe Yacht Club, and designed and built by Russell J. Pouliot. The other is the 38-footer built for J. B. Edwards, of the Detroit Boat Club, by the Burbach Yacht Co.

+ + +

Five 28-foot one-design sloops have been delivered to the Edison Boat Club members by Russell J. Pouliot, Inc., and trials of the new boats have been so successful that three more have been ordered by local yachtsmen. The boats have been given stable hulls and ballasted keels to make them safer in the hands of the beginner than the 22-foot shallow draft cats that have been the outstanding one-design class here for many years.

+ + +

Gar Wood, commodore of the Inter-Lake Yachting Association, is planning to revive the Commodore William Scripps Trophy event for power cruisers at the I.L.Y.A. regatta in August. The trophy first went into competition back when the century began and was once raced for in a port-to-port event, from Detroit to Toronto. Recently, it was run from Detroit to Put-In-Bay, Ohio, and return, a distance of 125 miles. The next year a shuttle course back and forth across Lake St. Clair, in connection with the Harmsworth event, was chosen. With the curtailment of yacht owners' budgets in late years, the race was discontinued. Commodore Wood is hoping to start the event from Put-In-Bay late in the afternoon, race to some Lake Erie port, and return to the Bay by morning. A trip through the Lake Erie Islands at night should give the skippers a real test.

WALTER X. BRENNAN

Save REPAIR Costs With WOOD In Cans

Plastic Wood Handles Like Putty—Dries to Hard Wood—Makes Permanent Repairs

Boat owners, thanks to Plastic Wood have now found a means to overcome the serious damage caused by wood decay. Plastic Wood actually prevents the decay of wood in many vital places—and simplifies the repairs that are necessary.

To insure permanent repairs, decayed parts should be cut away and Plastic Wood firmly pressed into place. When dry it will be hard wood. In the prevention of decay Plastic Wood is used to fill cracks, nail holes, knot holes, loose bolts, fill around pipes, masts, cabins, or where water may collect and is unable to evaporate.

Plastic Wood handles like putty, can be shaped, moulded, and when it dries it is hard, permanent wood that will hold nails, screws; can be sanded, planed, carved. Can be lacquered, painted, or varnished perfectly. Is water-proof and weather-proof. Get your can at any ship-chandler, paint or hardware store.

Write the A. S. Boyle Co., Inc., Y-6, 1934 Dana Ave., Cin., O., for interesting booklet on boat repairs.

PLASTIC WOOD

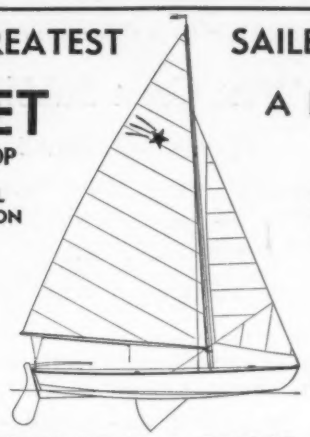
TODAY'S GREATEST SAILBOAT VALUE

COMET

A 16' SLOOP

WITH A NATIONAL CLASS ORGANIZATION

FAST, ABLE, SEAWORTHY



A FINE LITTLE YACHT

COMPLETE IN EVERY WAY FOR

$225.00

ALSO A FULL LINE OF SAIL AND ROW BOATS

SKANEATELES BOAT & CANOE CO., INC.

FOUNDED 1893 SKANEATELES, N. Y.

INCANDESCENT SEARCHLIGHTS

This illustration introduces our new heavy duty type of searchlight. Heavy yoke and rugged control gear. Other improvements make the projected beam very powerful.

CATALOG I—Incandescent
CATALOG A—Arc
CATALOG F—Floodlights

The
CARLISLE & FINCH CO.
249 E. Clifton Ave.
CINCINNATI OHIO

For
Greatest Driving Power, Strength and Durability
Specify
IMPORTED EGYPTIAN COTTON YACHT DUCK
Made in England
SOLD THROUGH SAILMAKERS ONLY

DE GRAUW, AYMAR & CO.
ESTABLISHED 1827
35–36 South St., New York, N. Y.

HYDE BRONZE

and the

Salt in the Ocean

Some alloys are tough but will not withstand the ravages of Salt Water. Others resist corrosive action but lack the necessary strength or are brittle. But Hyde Bronze is one metal that combines both of these all-important characteristics. This is why Hyde Propellers last indefinitely in salt water. This is why they hold their pitch and do not shatter with impact. This is why they are so generally used and are so satisfactory. Use a Hyde Propeller and get these features.

HYDE WINDLASS COMPANY, Bath, Me.
Member Marine Propeller Manufacturers Ass'n.

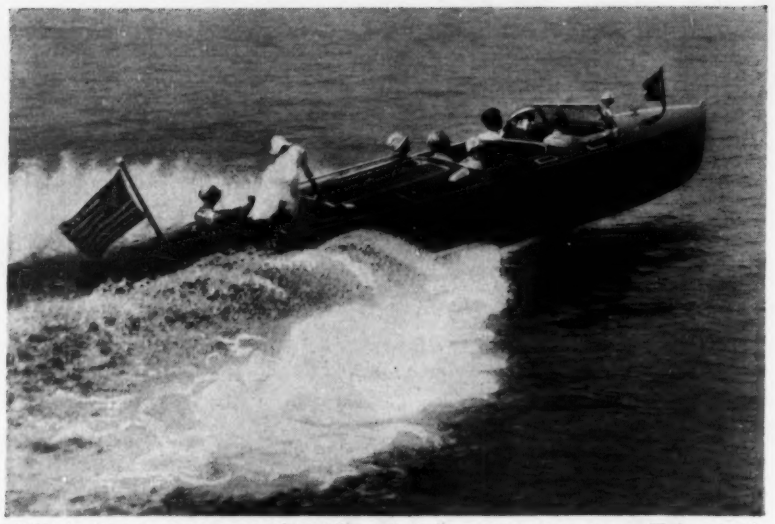
HYDE
PROPELLERS

Send for this free booklet "Propeller Efficiency". It will tell you why Hyde Propellers often increase the speed of a boat and always get home safely.

DEALERS EVERYWHERE CARRY AMPLE STOCKS

TAKE MR. McCREADY...

He's Tough on Wheels



● "Hacker Boat Company has used Monel Metal shafts for a period of over 8 years. We have standardized on them year after year, never substituting any other for them." S. D. McCready, President.

He has broken or bent a good many propellers, but he's still using the same Monel Metal shaft

—BY MORT CALKINS

I KNEW Mr. McCready quite a few years before he was elected president of the Hacker Boat Company, and he has always been just as pleasant to get along with as an old shoe.

"Mort," he's said to me, "every time I try to chop driftwood with that runabout of mine, I live to regret it. But no matter how badly I bang up the propeller, the propeller shaft never seems to get any harm."

We looked over his boat's underbody just a few days ago before we put her into the water for her seventh year. That Monel Metal shaft is, as Mr. Mac says, "perfect." It's as clean and straight as the day it was put in.

He tells me that the Hacker Boat Co. is about to bring out a new line of low-priced boats, and Monel Metal propeller shafts will, as usual, be standard equipment.

"Mr. Mac," I tells him, "when you put out low-price boats with Monel Metal shafts you are setting a good example to the yards like mine."

Mort Calkins

MONEL METAL

Monel Metal is a registered trade-mark applied to an alloy containing approximately two-thirds Nickel and one-third copper. Monel Metal is mined, smelted, refined, rolled and marketed solely by The International Nickel Company, Inc., 67 Wall Street, New York, N. Y.

The 53-foot Alden-designed schooner "Arcturus" was shipped to Los Angeles by the American-Hawaiian liner "Kentuckian." Her owner, Col. S. G. Patton, Jr., is now cruising in her to Honolulu which will be her home port

West Coast Bubbles

By WALDO DRAKE

ALF LOOMIS'S classic plaint about "are there any sailors in the Navy" does not apply to the Army, at least as far as Lieutenant Colonel George S. Patton, Jr., noted cavalry tactician, is concerned.

As his own navigator, Col. Patton, who is equally at home on blue water or the polo field, left San Pedro on May 7th for Honolulu with his 53-foot schooner *Arcturus*. His crew consisted of Mrs. Patton, the former Beatrice Ayer, who last season at Marblehead won the Eastern and Corinthian women's Class S titles with *Venture;* Gordon Prince, veteran Boston cruising sailor, and Mrs. Prince; Francis P. Graves, Los Angeles yachtsman; and Joseph Eckland, well-known East Coast professional. Col. Patton was recently transferred from duty at Fort Myer, Va., to staff duty with Major General Hugh A. Drum, commanding the Hawaiian Department, and decided to proceed to his new station in his own boat.

+ + +

Templeton Crocker was back at San Francisco in May after an eight-months' scientific cruise to the South Seas aboard his 130-foot schooner *Zaca.*

The objective of the 14,000-mile cruise was anthropological and ornithological research of Polynesia by three scientists of the American Museum of Natural History: Dr. Harry I. Shapiro, Dr. James R. Chapin, and F. J. Jaques.

Crocker said that the high light of the long jaunt was the visit to Pitcairn Island, where self-exiled mutineers of *H.M.S. Bounty* fused with South Seas natives 140 years ago. English blood is still evident on Pitcairn, he said, but the descendants of the *Bounty* mutineers have developed a language of their own, mixed with English in syntax and pronunciation.

+ + +

Donald W. Douglas, commodore of the Southern California Yachting Association, and aviation leader, visited New York late in May, en route to London, where on May 30th he was to deliver the Wilbur Wright Memorial Lecture before the annual meeting of the Royal Aeronautical Society. Just before he flew to Manhattan "Don" completed the work of converting his 74-footer *Endymion*, Pacific Coast champion, from a staysail schooner to cutter rig. In her first trials as a single-sticker *Endymion* easily showed her heels to several Class M and Twelve-Metre sloops on San Pedro Channel and demonstrated materially improved windward ability.

+ + +

Owen Churchill, inveterate South Coast racing sailor, is being held up as a renegade to the cause of the windjammers by his

WHEN you've traveled to see the regatta, don't lose the chance to see every stroke of the race for lack of a fine binocular. In 1934 the Bausch & Lomb binocular was bought by more sportsmen than ever before. 40-page catalog, sent on request, will show you why this preference.

BAUSCH & LOMB
OPTICAL CO.
152 LOMB PARK
ROCHESTER, N. Y.

7 x 35 Binocular, $86

We suggest for breakfast and other informal occasions our paper napkins, plates and cups (for hot or cold drinks) with picture of your yacht or flags in all their colors.

Brennig's Own Turkish or Virginia cigarettes, book matches and playing cards similarly marked.

Illustrated circular on request

BRENNIG'S OWN, INC. 501 FIFTH AVE. AT 42nd ST. NEW YORK

Cruising is Carefree

Now you can cruise without a care! Descriptive booklets are available on the modern N line Diesels. We shall be glad to send you copies if you will tell us the horsepower rating of most interest to you. Write The Cooper-Bessemer Corporation. General Diesel Sales Offices, 25 West 43rd Street, New York City. Plants at Mt. Vernon, Ohio - and Grove City, Pa.

with Cooper-Bessemer Diesels

A PAINT FOR EVERY PURPOSE

This folder tells you the proper paints to use for bottom, boottop, top sides, decks, interior and exterior cabin work so that the paint job holds up. Yours for the asking. Cut out this advertisement, attach to your letterhead and mail.

International YACHT PAINTS
HOLTZAPFEL'S

International Paint Company, Inc.
21 West St., New York, N. Y.

WILSON SAILS
(Formerly BURROWS)

Unretouched photograph

EDLU
Canvassed by Wilson

Edlu — owned by Commodore Schaefer of Larchmont Yacht Club, — scored a remarkable triumph by winning in all classes in the New London-Bermuda Race in 1934. She was fresh from the builder's yards with no opportunity for a real tuning up or a shake down cruise.

Wilson Sails are playing their part in establishing winning records for leading ocean racers, as well as for champions in one-design and special racing classes.

PRESCOTT WILSON INC.
Yacht Sailmakers

2 SOUTH STREET, NEW YORK

Telephone: BOwling Green 9-9062 Cable Address: "Winners"

A MILLION DOLLARS WORTH OF FUN FOR $1575

THAT'S what a Richardson Little Giant will give you — a million dollars worth of health, happiness and wholesome fun at a price far below the amount you'd expect to pay for this beautiful and staunchly built 25-footer.

Fish, swim, go places and see things on the traffic free waterways; breathe fresh, clean air free from the dust of the city's streets; go miles away from the maddening holiday crowds — then you'll know the joy of carefree living.

Richardson Little Giant, the world's lowest priced, quality built 25' cruiser, is beautifully designed, tastefully appointed, staunchly built and elaborately finished inside and out. Living accommodations are complete for four people to cruise for a week or a year. The cockpit will accommodate a dozen on a joy ride or day cruise.

In addition to the many exclusive features and the attractive low price, Richardson Little Giant is powered with a smooth, economical six cylinder Gray Marine motor that drives her 18 actual miles per hour all day long and never gets on your nerves.

Find out about this low priced 25' Richardson Little Giant, 29' Richardson Jrs. and 32' Richardson Cruisabouts by writing today for Richardson literature "F-35" which is free for the asking.

GET A LOG BOOK FREE

A Richardson log book keeps a record of your boat and the fun you have this summer. It also contains lots of valuable yachting information. Send your name, address, name, registration number, size and type of your boat, yacht club affiliation and a 3c stamp to cover postage and receive this valuable and handy book absolutely free.

RICHARDSON BOAT COMPANY, INC.
365 Sweeney Street, North Tonawanda, New York

RICHARDSON
LITTLE GIANTS JUNIORS
CRUISABOUTS

You Don't Have to Be Rich to Own a Richardson

confrères. He was caught red-handed last month in the act of converting his Olympic champion "Eight" *Angelita* to a motor boat. He cut a hole under the starboard quarter, through which, when needed, the shaft and screw of an outboard motor protrude.

He has promised to keep the Evinrude under lock and key while racing, and swears he installed the fittings so that he can navigate the German canals when he takes *Angelita* abroad next June in hope of defending her title.

\+ + +

Edmund Lowe, Jr., San Francisco sportsman, has purchased from Lyn Atkinson, of Los Angeles, the 96-foot Diesel cruiser *Canim*. She was delivered at the Bay City early in May by L. E. Geary.

\+ + +

Mid-June is expected to find the Aeolian Yacht Club, of San Francisco, engaged in a challenge for the venerable San Francisco Perpetual Challenge Trophy, long held by the Corinthian Yacht Club, of the Bay City, and successfully defended against eleven attacks by Southern California yachts. The probable Aeolian challenger would be Dick Mattekuhn's Class R sloop *Machree*, and the defender Charles Langlais' 20-rater *Lady Gay*.

\+ + +

The San Diego Lipton Cup Challenge Race, South Coast counterpart of the San Francisco Challenge Race, will be sailed off San Pedro on June 2nd. The challenger is M. H. Adamson's "R" sloop *Pirate*, of the Catalina Island Yacht Club. Defending for the Los Angeles Yacht Club will be "Bill" Slater's Six-Metre *Lanai*.

Since the event is open to one yacht from each member club of the Southern California Yachting Association, all top-flight "Sixes" and 20-raters along the South Coast are due to participate.

\+ + +

Charles A. Page, owner of the ketch *Charmar*, is reported the proud owner of the first unit, now building, of the fleet of 22-Square-Metre sloops projected for South Coast clubs, from designs by Edson B. Schock.

\+ + +

Big California yachts off for spring cruises during May included: Morgan Adams' 110-foot schooner *Radio*, to Honolulu; J. Horton Singer's 78-foot schooner *Navigator*, south to Acapulco on a fishing cruise; Keith Spalding's 170-foot schooner *Goodwill*, to the Gulf of California; W. J. Hole's Diesel cruiser *Samona II*, fishing in the Gulf of California.

Great Lakes Breezes

By R. A. HAYNIE

JOHN O'ROURKE of the Jackson Park Yacht Club has purchased the Eight-Metre *Balek* and will ship her out here immediately. This is especially interesting as she will be the first "Eight" on Lake Michigan and probably marks the beginning of racing in this class here with possibilities of intersectional contests. The yacht will be renamed *Shamrock*.

\+ + +

The Chicago Yacht Club's Star fleet is still growing. Russ Moon and Dave Kales sold their Eagle *Quienne*, and are having a Star built at Thompson's yard.

Leeds Mitchell, Jr., purchased *Quienne* and will sail her under Chicago's colors.

\+ + +

The Eagle Class expects to have a most active season. The members of this class adopted a new set of rules this winter which will rigidly enforce the one-design features. They have

legislated against all trick booms, speedometers and such gadgets. They also restrict the size of light sails, and require that all sails be made by one sailmaker. This should help greatly in the continued success of the class.

+ + +

Eddie Schnabel, after years of crewing on *Ariel*, has purchased the Class R *Yankee* and is fitting her out to add to the competition in that class. Evidently, *Ariel's* parachute spinnaker got the best of Eddie. *Yankee* has a most comfortable cockpit and Eddie will probably have some cushions to make it more so.

With this addition, the "R" fleet will have ten boats in active racing, probably the finest aggregation of yachts in the history of the class.

+ + +

Speaking of gadgets, Jedrzykowski and Kallgren, who own the "Q" *Princess*, designed, made and installed an electric wind indicator last year. It is remarkably successful. Some of the boys out here who are not as mechanically inclined are hoping some manufacturer will develop such a contrivance for small yachts.

+ + +

And Nat Rubinkam's new cutter, *Rubaiyat*, will have a loose-footed mainsail with a specially made boom to handle it. She will also have the latest idea in streamlined masts, but she will still be a most comfortable cruiser, notwithstanding the fact that she is built right up to the limits of the rule.

+ + +

Henry Babson's new yawl rates well under the new cruising rule and it will be interesting to see how the performance of these yachts will compare with the older ones under the present rule.

+ + +

In this connection, the Lake Michigan Yachting Association has revised the Cruising Measurement Rule by reducing the various penalties, such reductions to apply only to such yachts as have been built prior to January 1st, 1935. It was thought that the penalties provided in the Cruising Club rules are unfair in many cases, considering the heterogeneous class of yachts in the cruising division.

+ + +

The recent consolidation of the several park boards in Chicago has been of real benefit to local yachtsmen. It has brought all of the harbors, with the exception of the Grant Park basin, under one control and, to assist in administering to the requirements of yachts, the Park Commissioners have appointed Eddie Buker, of the Jackson Park Yacht Club, supervising harbormaster. Already the results of his efforts on behalf of yachtsmen are apparent.

Grant Park harbor remains under the control of the Federal Government with the direct supervision in the hands of the Coast Guard. This year, for the first time in the history of the harbor, there will be real control of the moorings. The entire mooring plan was prepared by a committee of the L. M. Y. A., headed by Dave Zimmerman.

+ + +

Charles S. Davis, of Chicago and Northport Point, has purchased the 92-foot power yacht *Verano*, and will bring her to the Lake as soon as she is fitted out. Mr. Davis also owns the schooner *Malabar VI*.

+ + +

Moe Salisbury, who has been out of the game these many years, decided life wasn't worth while without a boat and has bought a Matthews "Sailer." He will do his bounding over the main from Sheridan Shore.

W. B. Wacksman of Columbia has also purchased one of these Matthews sailers. We may soon expect to have special races for this class.

GORDON'S
DISTILLED LONDON DRY GIN
DISTILLED & BOTTLED IN THE U.S.A. BY THE DISTILLERS COMPANY LIMITED
LINDEN, NEW JERSEY
GORDON'S DRY GIN COMPANY LIMITED
LINDEN, NEW JERSEY
UNDER DIRECT SUPERVISION OF TANQUERAY, GORDON & CO. LTD.
LONDON, ENGLAND
THE HEART OF A GOOD COCKTAIL
WE SERVE GENUINE GORDON'S GIN

THE SIGN

OF A GOOD BAR

As people become more discriminating in their taste, they invariably turn to Gordon's Gin. It is the sign of a good bar in every country in the world.

THE HEART OF A GOOD COCKTAIL

94.4 PROOF

Permit R-514

"The more you learn about batteries, the surer you are to ship an Exide"

Old timers know how much can depend on the battery in a boat. They have watched the development of modern electrical auxiliaries, with all their comfort, convenience and added safety. And they are keenly conscious of the responsibility that rests on the battery.

Even if you paid a premium for Exide dependability, it would be worth it in peace-of-mind. But thousands of users can tell you that you'll actually *save* money with an Exide. Its long life and freedom from trouble pay substantial returns on your battery investment.

For larger craft, with 32-volt or 110-volt current, the Exide Marine Floating Battery System, using Exide-Ironclad Marine Batteries, offers many special advantages. It is a tremendous advance in safety, and contributes greater pleasure to every minute afloat. There is a dependable Exide for every size of boat and type of installation. Write for booklet, "Exides for Pleasure Craft."

THE ELECTRIC STORAGE BATTERY CO., Philadelphia
The World's Largest Manufacturers of Storage Batteries for Every Purpose
Exide Batteries of Canada, Limited, Toronto

NRA CODE

Exide
IRONCLAD
MARINE BATTERIES

Exide Marine Battery units for every size boat

Henry A. Jones, local distributor for Matthews and Richardson also reported the following sales:

46-Foot Matthews Day Cruiser to R. H. Norton of Jackson Park.

46-Foot Matthews Sedan to another Jackson Park member.

38-Foot Matthews Twin Cabin cruiser to George A. Brown.

25-Foot Richardson Cruiser to Fred E. Garner.

25-Foot Richardson Cruiser to Chester B. Rich.

Narragansett Bay Gossip

By SPINNAKER LIZ

ALONG the shores of all the boat yards and yacht clubs of Narragansett Bay, the water is fast being covered with boats of every size and description. If one made a tour of inspection around the Bay, he would find in Wickford, at Saunder's Yard (where work has been held up a little on account of the new railways), Tom Harris' motor sailer *Black Gander* which is having a bowsprit and pulpit built on her as her owner expects to do a little swordfishing this summer. George Squibb's *Bagheera* is being painted and put into commission.

\+ + +

Next, at the Frederick S. Nock yards, in East Greenwich, F. F. Walsh's new schooner *Escape* was launched in April. She is a husky looking craft with rather old-fashioned gear, gaff-headed fore and mainsails going up the masts on hoops instead of tracks and slides, and laced to the booms and gaffs, the shrouds being set up with lanyards and deadeyes instead of turnbuckles.

The 43-foot sport fisherman for Harold Hoffman is well along, with the engines installed, deckhouse on and the fish well practically finished. The keel is laid for a sister ship, her frames bent, and planking will start immediately.

Boats already in the water are: Charles F. Vaughn's *Hallee*, William Bannon's *Idle Time II*, Joe Lawton's *Daffodil*, Bob Parson's *Dog Star*, Dr. Murray's *Algonquin*, Ralph Hamilton's *Show Boat*, and Judge Hathaway's *Roseway*.

\+ + +

Further up the Bay, at the Rhode Island Yacht Club, C. O. Sparkhawk's new power cruiser *Seahawk* was the first boat anchored off. Other boats already at anchor are: Dr. Talcott's *Harriet*, Roland Martin's Herreshoff 15-foot *Mystery Jr.*, Dexter Lewis' Alden auxiliary ketch *Hersilia*, and quite a few motor boats.

The Rhode Island Yacht Club plans to have its annual regatta July 13th.

\+ + +

At the peak of Narragansett Bay, really the Providence River, is the Anchorage, where they have been working full time shipping out dinghies. Bill Dyer hopes to launch the new "Newport 30" for John Saugy, this week. She is equipped with a Chrysler Crown reduction gear motor and her name is *Floalong*.

\+ + +

Jaunting down the other side of the Bay, in Riverside, is Shaw's Yard, where they are changing Russell Green's yawl *Norma* from a centerboard to a keel boat with a 5,000 lb. keel. Several boats already have been launched, including the sloop *Hadji*, and the motor boat *Quits*. Many other boats are being fitted out and will soon be in commission.

\+ + +

Stanley's Yard, in Barrington, across from the Barrington Yacht Club, has launched a number of boats, some of which are: Howard Easton's Elco "50" *June*, Fred Mason's *Bay Queen*, P. T. Jackson's yawl *Carmita*, Phillip Briggs' *Svint*, a double-ended cutter built in Norway last year, and Russell Field's Casey cruiser *Martha*.

The Barrington Yacht Club, at its annual meeting, elected Elmer S. Horton, commodore; William A. Mathewson, vice commodore; Amory S. Skerry, rear commodore; Frank A. Young, secretary-treasurer. As the club has an increased membership this year they are wondering just where there will be room enough in the river for all the boats to moor. It will be quite a problem!

\+ + +

Going down the river, into Warren, is Newman's yard where Ruth Wood's yawl *Asahi* had a complete overhauling and is now in the water. Herbert Adams' Eight-Metre *Ala II* has been sold to Mr. Conrad of Bath, Maine. Mr. King's *Sea Urchin* is going into commission, and Victor Nylen's 42-foot sloop *Slim* has been converted from gaff rig to marconi rig and will soon hit the water.

\+ + +

Albert Alder, in Warren, has orders for five 13½-foot life boats, one to be used in Bristol, three in Barrington, and one in Warren. Mr. Alder is also building ten skiffs of his own design for J. T. O'Connell in Newport.

\+ + +

At Herreshoff's, in Bristol, the Diesel yacht *Vara*, belonging to Harold S. Vanderbilt, is in the slip having repairs and alterations made.

Alongside, lies Charles B. Rockwell's yawl *Belisarius* which has just returned from Nassau, having been sailed down and back. She will be painted and refitted.

"Billy" Strawbridge's new Twelve-Metre yacht is getting on, with her planking finished and work on her interior construction advancing. She is expected to be launched somewhere around the first of June, soon after this is printed.

Herreshoff's have just finished a 15-foot lapstrake dinghy for Francis Herreshoff, from his own design, to be sailed at Marblehead.

Five of the Herreshoff 12½-footers and four Amphi-Craft have been sold. The former are to be used at Mattapoisett; of the latter, one has been sent to Seattle, one to Boston, and two to New York.

Richard V. N. Gambrill is having extensive work done on the rerigging of his New York "50" *Carolina*.

R. H. I. Goddard's schooner *Ramallah* is also being rerigged and her foremast lengthened.

\+ + +

Belknap and Paine have designed a 38-foot motor sailer for Norman B. MacColl of Providence. She is being built at Britt Brothers, in East Lynn, and will have a twin screw 80 hp. Chrysler reduction gear motor.

On Buzzards Bay

The first of the new 17-foot Clipper Class, from Furnans' design, is finished and is being tried out on the Bay. She is a nice looking boat, balances beautifully and has lots of room for day sailing. Furnans report the sales of the following: the 61-foot schooner *Saispas* to Dr. Roger M. Randall of Boston; the motor sailer *Emily Jane II* to Burnham Bowden of Irvington, N. Y.; and several others.

\+ + +

Kelly's yard, in Fairhaven, is busy repairing the *Virginia*, an 87-foot schooner belonging to Captain Harold C. Speed which had been damaged by fire.

Drayton Cochran's 107-foot schooner *Mabel Taylor*, which has been under charter and has just returned from a West Indies cruise, is having extensive repairs made to her stern.

Samuel A. Salvage's Diesel yacht *Colleen* is being overhauled and will leave soon for Glen Cove.

Ralph E. Forbes' 40-foot Alden sloop, the *Lark*, has been overhauled and is in commission.

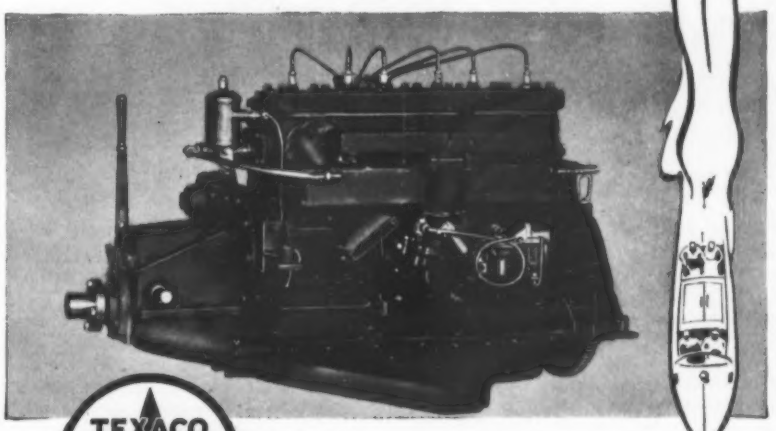
For every boat

POWERED BY LYCOMING

Here's a vitally important message from one of the largest builders of marine engines

"Marine Engines," says Lycoming, "operate at full-throttle most of the time. A great marine engine will always turn in a great performance if the fuels and lubricants have the stamina to handle the load." ★ Texaco *marine* Products are made especially for marine service. They have proved their superior stamina in all sorts of service. Leading boat and engine builders approve them. Thousands of owners find Texaco *marine* Products cost less to use. ★ You will find Texaco *marine* Products at all ports of call along the coast and inland water routes. Texaco dealers will help you select the fuels and lubricants best suited to your boat.

See Pages 2 and 3

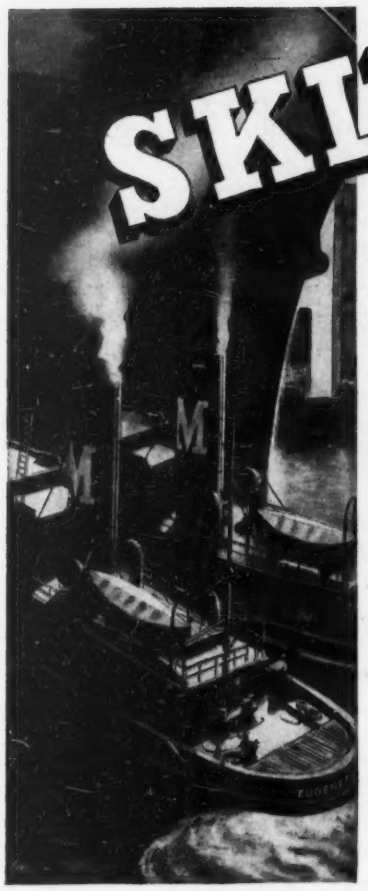


TEXACO

marine products

Texaco Thuban ★ Texaco Cup Grease ★ Texaco Marine Motor Oils ★ Texaco *Fire-Chief* Gasoline ★ Texaco Ursa Oils for Diesels ★ Texaco Water Pump Grease ★ Texaco Outboard Gear Lubricant

PROVIDE AN "ABLE CREW" FOR EVERY BOAT



SKILL...

. . . is the first requirement in the important work of ship-handling in harbors, or in coastal towing or in moving inland water freight. Equipment is next, financial responsibility next. On all counts Moran qualifies . . . and has for 76 years. A phone call sets the organization to work . . . smoothly, efficiently, instantly . . . by night or day.

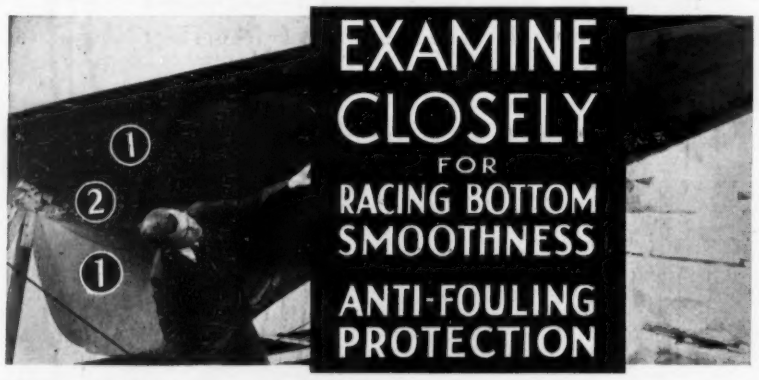
MORAN

TOWING & TRANSPORTATION COMPANY, Inc.

17 Battery Place, New York, N. Y.

WH itehall 4-1340

76 YEARS OF SUCCESSFUL TUGBOAT OPERATION



EXAMINE CLOSELY FOR RACING BOTTOM SMOOTHNESS ANTI-FOULING PROTECTION

Proved by Test!

One of the "test boats" at the end of last season. No. 1 stripes painted with Herreshoff Bristol — clean and smooth after a summer's use. No. 2 stripe, barnacle-encrusted, painted at the same time with a well known bottom paint.

• YOU have always hoped . . . HERE IT IS . . . FOR *YOUR* BOAT! SMITH HERRESHOFF BRISTOL GREEN. Hard. Fast. Powerfully anti-fouling.

Heretofore, racing bottom and anti-fouling bottom paints have fulfilled requirements that are *direct opposites*. So far as is known, all previous attempts to combine the two have been unsuccessful. But 3 years' testing in the laboratory and under actual service conditions proved that such a combination *could* be highly successful. And comparisons with 54 other existing brands of bottom paints proved this new SMITH-HERRESHOFF product to be unmistakably superior.

When you use this ULTIMATE Bottom Paint on your boat you do everything possible to avoid the wasted time, trouble and expense of a mid-season haul out.

Write for full particulars. Mention whether your boat is wood or metal and give us details of size and type.

•

EDWARD SMITH & CO. Long Island City, N. Y.

Manufacturers of Quality Marine Paints and Varnishes Since 1827

SMITH

HERRESHOFF BRISTOL GREEN

At Casey's yard, the new 50-foot Alden ketch for E. M. Farnsworth, Jr., slid down the ways the last of April and was christened *Gurnet*. Closely following on her heels was Fred Harwick's 40-foot ketch, of Casey design, which was named *Sophia*. In another week, probably, B. T. Dobson's 33-foot knockabout sloop will be overboard, with four more soon to follow.

Casey has just started two new 20-footers. They are 15 feet on the water, 7½ feet beam, and 4 feet draft. One has been sold to Miss Louise Strongman of South Dartmouth.

\+ + +

Peirce and Kilburn are still busy refitting and overhauling boats of all sizes.

Seward Prosser's schooner *Constance*, James R. Jewett's schooner *Marilyn*, and the power yacht *Katharine II*, owned by

The new 17-foot Clipper Class, designed by Furnans Yacht Agency for use on Buzzards Bay. The first one of these was under sail in early May

Henry R. Dalton, have all had a thorough spring housecleaning and gone to their respective anchorages at Woods Hole.

Alexander Forbes' schooner *Black Duck* is undergoing changes to the interior.

The Fishers Island sloop *Circius*, recently purchased by Allen C. Benies of Wayland, Mass., has been refitted and is in commission. She was formerly named *Her Excellency*.

New York Y. C. Cruise Schedule

RENDEZVOUSING at New London on August 14th (not the 8th as originally planned) the itinerary of the squadron cruise of the New York Yacht Club is as follows:

August 15 — New London to Fort Pond Bay
August 16 — Fort Pond Bay to Newport
August 17 — Newport to Vineyard Haven
August 18 — Sunday at Vineyard Haven
August 19 — Vineyard Haven to Mattapoisett
August 20 — Mattapoisett to Newport
August 21–22 — Astor and King's Cup Races

Massachusetts Bay Flashes

By ED EARLE

THE rousing *bon voyage* given the *Yankee* and her three-masted consort *Atlantic* on their departure from Boston for the invasion of English racing waters was the outstanding event of the spring. With more than a thousand well-wishers crowding the Army Base dock and a marine parade down the harbor outside the Graves whistler, Commodore Gerard B. Lambert of the Eastern Yacht Club received one of the greatest and most spontaneous send-offs in the log of the waterfront. An unscheduled and humorous incident gave Frank C. Paine, Jack Parkinson and Alfred Loomis, their first baptism of the voyage, when the overzealous Boston fireboat *Matthew J. Boyle*, with all her seven water guns in action, worked to windward of the yawl-rigged Cup sloop.

+ + +

Much water has splashed against Marblehead Rock since Capt. Erik Lundberg came across from Sweden with the *Bacchant* and cleaned up the home guard and the Germans in the last international 30-Square Metre series of 1929. The invading yachtsmen from the Baltic, who seek to sweep up the Marblehead and Roosevelt Cup series in Buzzards Bay, will run into a seahorse of another color this year as the U. S. forces will present an all-champion fleet which is the last word in modern design. The latest addition to the Marblehead sail area class fleet is the *Skjold VIII*, designed by Knud H. Reimers, built at Stockholm and formerly owned in Germany. Arthur W. Stevens of the Corinthian Yacht Club acquired her through E. Arthur Shuman, Jr., of Belknap and Paine. She has been named *S-X III*, following the Stevens dynasty of boats. As *Skjold VIII*, she was the winner of Kiel Week in 1933 against the best Danish, Swedish and German "Thirties."

+ + +

A shipshape and unusual launching featured the maiden dip of the new 39-foot over all ketch *Land's End*, owned by A. Lee Loomis and designed by Sam Crocker, from Britt Brothers' yard, West Lynn. *Land's End* went down to the sea on the midnight tide, all rigged, sails bent, tanks filled, and ballast aboard. She was equipped, even to her Kenyon log, and immediately sailed to Marblehead. This able looking boat is well arranged and draws the admiration of all hands. She should be a formidable contender in the Centennial and other cruising races this summer.

+ + +

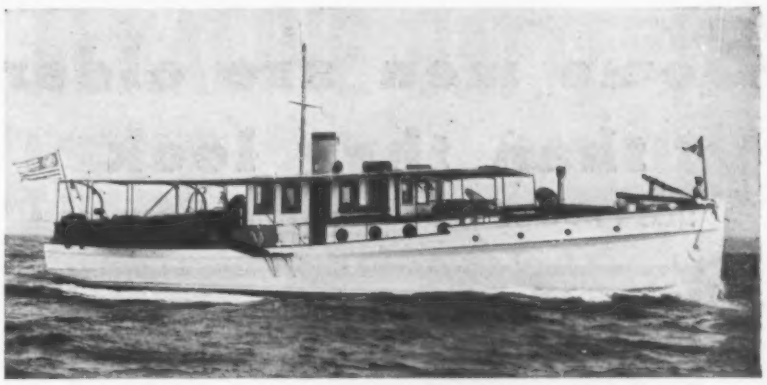
According to tradition, the racing season got under way in the annual invitation Memorial Day regatta of the South Boston Yacht Club, and Dorchester Bay was again dotted with sails, which showed a decided increase in the small boat classes. The Eastern Yacht Club went into commission on that day with the flag at half mast in memory of Jimmy MacNeil, its late beloved boatman.

+ + +

An optimistic slant is indicated by return of many large boats to commission this year. One of the most noted of the yachts coming back to the game is Joseph V. Santry's famous 72-foot schooner-rigged New York "Fifty" *Pleione*, winner of a cargo of silverware in her racing career. Also returning from the same Graves' yard, at Marblehead, is the 80-foot schooner *Mistral*, owned by Howard E. Perry of Portland, Me.

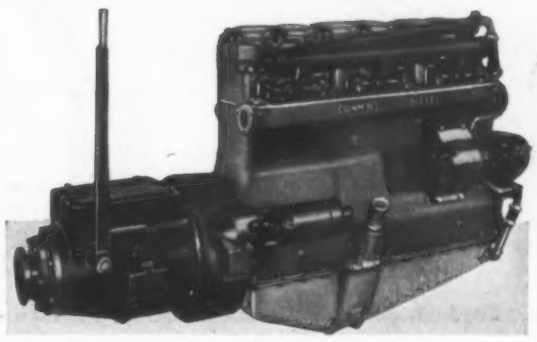
+ + +

The Pleasant Park Yacht Club, of Winthrop, will break into the racing game after years of rocking chair and fishing cruises. "Bill" Reid, only a few fathoms away from the Pleasant Park quarters, is turning out a one-design class of 16-foot centerboard, jib and mainsail boats for the Pleasant Parkers. Reid is busily



Yacht FEARLESS II—65′ x 17′6″ x 6′—powered by two 6-cylinder "HMR" CUMMINS Diesel Marine Engines. Owner: O. E. Braitmayer, New York City.

CUMMINS
DIESEL ENGINES



CUMMINS Diesel Marine Engine—Model "HMR"—6 cylinders, 100 H. P. at 1500 r.p.m. (Net weight, 2500 pounds.) Also made in 4-cylinder size, 55 H. P. at 1200 r.p.m. In addition CUMMINS offers larger, slower-speed Diesel marine engines, in sizes from 75 to 200 H. P.

give the incomparable satisfaction of Diesel power at its best

—instant starting
—maximum power efficiency
—minimum fuel consumption
—quiet, smooth performance
—simplicity of operation
—enduring dependability
—low maintenance expense

Before you equip a new boat or replace an old engine, see the latest CUMMINS Diesels—*years ahead* of conventional-type Diesels. Write for descriptive bulletins. Sales and service by experienced, responsible dealers in many cities.

CUMMINS ENGINE COMPANY
—The Leader in Diesel Engineering Advancement
COLUMBUS, INDIANA

Some men are older than they look

HERE'S HOW TO LOOK YOUNGER THAN YOU ARE

"HI BABE!"

LOOK in the mirror. See how those wrinkles and age lines are etching themselves in your face.

If you lived in the tropics there might be some excuse for premature old age showing on your face.

The broiling sun soon dries up the natural skin oils and makes men and women look old before their time.

Shaving that takes the oil out of *your* skin acts in much the same way as a tropical sun or a frigid winter wind.

That's why you see so many wizened-up old young men everywhere about you.

If you want to keep looking young and fit, get a tube of Barbasol.

Start shaving tomorrow with this modern latherless cream that makes a pleasure out of the daily chore of removing whiskers and protects the natural oil in the skin.

The bland oils in Barbasol leave your face in the pink of condition. It's so soothing that many people use it for sunburn, windburn and chapping.

No ingrown hairs when you use Barbasol. It holds each whisker steady to the cutting edge so that there is a clean cut at the base.

You'll look younger if you shave with Barbasol.

BARBASOL BLADES
now 5 for 15¢

For only fifteen cents you can now buy 5 of those scalpel-keen Barbasol Blades that make shaving a joy.

They're going like hot cakes, men. Step up and get yours today.

Shave the Barbasol way.

Soften your whiskers with Barbasol Shaving Cream and mow 'em down with Barbasol Blades. It's the perfect shaving combination.

Tune in Singin' Sam—the Barbasol Man—every Friday evening over WOR, New York; WLW, Cincinnati; WXYZ, Detroit; and WGN, Chicago. (See your newspaper for local time.)

working on six new boats from the designs of Sam Crocker. The boats have all the earmarks of smartness with a sail area of 142 square feet, and forward and side decks.

\+ + +

Commodore Lloyd B. Salt is behind the resumption of racing at the Scituate Yacht Club. Roger Mills and Ralph Kinney have started things by ordering three of the 18-foot Sea Birds designed by Fred Goeller which are being built at Lamb's yard. Lamb is also building a 22-foot sloop for a Texas yachtsman which is to be shipped to the Lone Star State.

\+ + +

With the Columbia, Pleasant Park, Scituate and Wollaston Yacht Clubs returning to the racing game and plenty of new craft in action, the outlook is the best in years.

\+ + +

Eldredge-McInnis report the sale of the 37-foot auxiliary yawl *Amantha* from King Upton to Dwight and Francis Marsh. *Amantha* will sail out of Marblehead this summer.

\+ + +

Unusually large turnouts featured the opening nights at both the Savin Hill and Quincy Yacht Clubs. The Savin Hill quarters, incidentally, just escaped a threatened commercial invasion of tanks and docks but the Press and the Massachusetts Bay Yacht Clubs Association, representing some 10,000 members, went to bat and saved the day.

\+ + +

The second of the five Alden-designed motor sailers building by Graves, Marblehead, will go overboard about the 24th of June and the third will follow shortly. *Parthenia*, the first of the fleet, owned by Parker Converse, is performing to the queen's taste in Marblehead Harbor. This roomy craft, with plenty of headroom and well thought out space arrangements, looks larger than her 32 feet, 7 inches over all and 11-foot beam. *Parthenia* can make nine miles an hour under power.

\+ + +

E. Leroy Lane has just been elected chairman of the Hingham Yacht Club. The committee of ten includes Charles H. Cobb, George W. Canterbury, C. H. Paulsen, George W. Canterbury, Jr., H. W. Barker, George A. Cole, George Melcher, Thorvald S. Ross, Thomas P. Smith and Miles Wambaugh.

\+ + +

The Eastern Yacht Club laid out a fine cruise schedule for this season. Nantucket is a new port on the annual trek and the two week-end cruises are popular with the owners of small cruising craft.

News of the Comet Class

WORD has just come from the corresponding secretary of the Comet Class Yacht Racing Association that in the past three weeks he has registered almost forty new boats, a figure which goes far to prove the popularity of this little one-design racing sloop.

\+ + +

The new Raritan Yacht Club fleet has just been organized, with Louis P. Booz, Jr., as fleet captain and Elwood Johnson as fleet secretary and treasurer. Eleven boats are registered and the fleet is looking forward to a big season.

\+ + +

Four boats will sail in the Keyport Yacht Club fleet which expects to be completely organized shortly. Work on the new Key-

port boats has progressed rapidly and the fleet expects to enter the national championships in September.

+ + +

Six boats are expected in the Richmond County Yacht Club fleet, at Great Kills, Staten Island. Several of these boats are coming from the Skaneateles Boat & Canoe Co. Two members of this fleet, who are building a Comet, hope that she will eclipse anything yet shown on Raritan Bay.

+ + +

The Comet has been accepted as a one-design class by the Raritan Bay Yacht Racing Association which has four member fleets, with a total of twenty-one boats, in process of organization. The National Comet Class championship regatta will be held on September 7th and 8th at the Raritan Yacht Club, Perth Amboy, N. J. Every registered Comet which has been officially measured is eligible to enter the regatta. Further information may be obtained from the corresponding secretary, John Frye, Room 2106, 195 Broadway, New York City.

+ + +

The class has just been organized at Washington, D. C., under the direction of Mr. D. Verner Smythe and is starting with a fleet of five.

+ + +

At Stone Harbor, N. J., where one of the first fleets was organized, there will probably be twenty boats this year. Dr. Eiman, president of the class, who is a member of this fleet, has decided to build a new Comet this year with which he hopes to retain the President's Trophy at the national regatta. The Stone Harbor Yacht Club invites any registered Comet to its special regatta for the class, to be held on August 17th and 18th.

+ + +

Five Comets were under sail at West Medford, Mass., last summer, though there was no official organization. Under the direction of John Black, that city expects to have a fleet with several new boats worthy of respect in any company. More will be heard from this fleet later.

GEORGE D. EMMONS, JR.

Chesapeake Chatter

STAR yachtsmen of a dozen fleets are expected to participate in the ninth annual Chesapeake Lipton Series, August 16th–18th. Two dozen Stars turned out in 1934 and more are expected this summer. The course will be on the Choptank River, off Oxford, Md., and the series will be handled by the Chesapeake Bay Y. C. The results of the first and third races will also determine the winner of the J. Graham Johnson Memorial Trophy.

+ + +

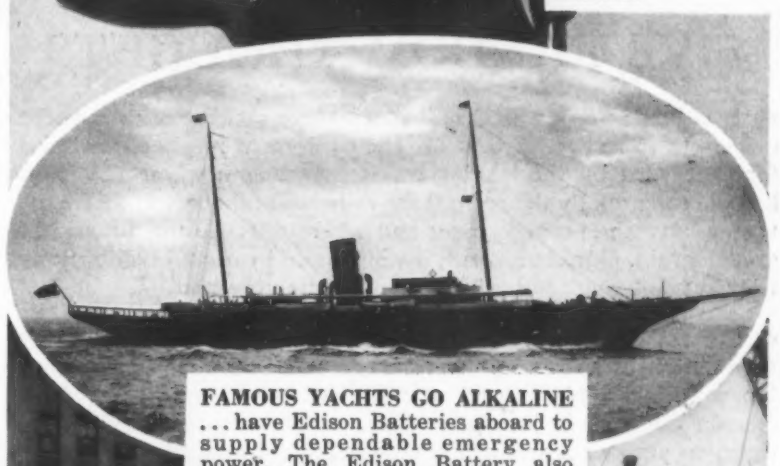
Much interest is being shown on both shores of the Chesapeake in the fleet of junior boats approaching completion at M. M. Davis' yard at Solomon's Island. Seventeen are building for the Gibson Island Club Yacht Squadron and 25 may be afloat by the time the season's curtain-raiser is held. From the board of C. Lowndes Johnson, designer of the popular Comets, the little centerboarders are 11 feet 6 inches over all and carry a single marconi sail. They resemble and may race with the Moths. The boats are all being named after birds and are being built to encourage racing among youngsters too small to handle sneakboxes and other existing small classes.

+ + +

The elimination races of the Eastern Shore Star Fleet to select a challenger for the International Championships have been scheduled for June 28th, 29th and 30th on the Chester River, near Centerville, and on July 5th, 6th and 7th, on the Choptank River, off Oxford.

ALKALINE BATTERIES KEEP YOUNG

GOB-LET KEEPS ALKALINE . . . keeps young. And, when a Storage Battery is alkaline, it keeps young, too – lives longer–costs less per year – works harder. Proves more economical and dependable for use on boats. Edison Batteries are alkaline.



FAMOUS YACHTS GO ALKALINE . . . have Edison Batteries aboard to supply dependable emergency power. The Edison Battery also proves itself a good "keeper". You can lay it up for the winter without deterioration.

SYMPHONY IN STEEL is Radio City. Edison Batteries are built of steel, too–the only battery made in the United States that is so rugged. No wonder Edison Storage Batteries "keep young". Furthermore, because there is no acid in them, they never give off acid fumes.

YOUNG EDISON was making chemical experiments even as a "news vender". Later invented the Alkaline Storage Battery. See the local representative for equipment aboard your boat or for information write Edison Storage Battery Division of Thomas A. Edison, Inc., West Orange, N. J.

FIVE RANDOM THOUGHTS

● It is just as economical and much more satisfactory for yacht owners to store in a yard where the equipment has been designed for that yard by the leading marine engineers; where the loads have been carefully figured out for railways and cradles; where the tracks have the proper grade; and where rolls are not broken by excess strain. Our equipment, installed and inspected regularly by the Crandall Engineering Company, is the very best.

● Our railways have just been extended and we now haul vessels with a draft of 14 and 16 feet. You can haul or launch at any time. No waiting for high water at "The Midway Yard." The diver (shown above) has just been down to make sure everything is right, so your vacation will not be delayed by faulty equipment.

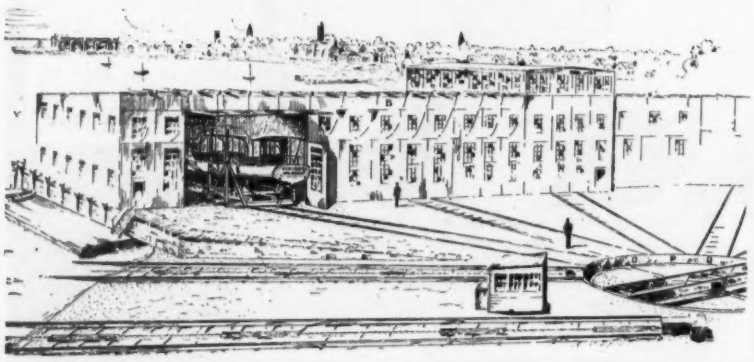
● If you want a top-notch black varnish job, come to us. Ours do not blister. We solicit your Midsummer Painting.

● While cruising this summer, come aboard and have lunch at The Galley. Use our landing stage while you visit the new addition to the Bourne Whaling Museum and inspect the one-half size model whaleship *Lagoda* and the fine collection of ship models recently received from the estate of Louis de Coppet.

● Next fall do not change your storage yard if you are entirely satisfied. If you do decide to change, inspect several yards first hand. A busy yard, not congested, usually works well. If you are considering our yard, make your reservation now as the spaces in our new B shed (shown below) are already limited.

PEIRCE & KILBURN, INC.

NEW BEDFORD, MASS.



Among the new Stars which will make their appearance on the Chesapeake this summer are new Parkman craft for Miss Nina Raskob and Mrs. Elizabeth Ann Parkman, of Centerville, and for F. V. DuPont of Cambridge. C. Lowndes Johnson's new *Wave*, an exact replica, he hopes, of his former international champion *Eel*, is now approaching completion at his Easton home and is expected to be a terror in light airs.

\+ + +

The annual regatta of the Chesapeake Bay Y. C., August 16th, 17th, and 18th, will feature the historic Commodore's Trophy for log canoes. In addition, a new trophy is being placed in competition for the Eight-Metres. Among the expected entries are *Loke*, *Sunny*, *Silhouette*, *Rangoon* and *Ace* from Gibson Island. The Class Q *Lone Star* and the Seven-Metre *Valkyrie* may race with the "Eights" on time allowance.

\+ + +

A trim new 34-foot cutter for Ned Woodall is approaching completion at Smith's yard, at Seaford, Delaware.

\+ + +

The Tred Avon Y. C. is listing a cruising race for July 2d, 3d and 4th from Oxford to Cambridge and return. The club's annual regatta is set for August 16th to 18th.

\+ + +

Emulating the Captain's Island Race for Stars on Long Island Sound, the Chesapeake will have a long distance contest for the class this year in what is to be an annual event. On July 13th the Stars will race thirty nautical miles from Oxford to St. Michaels.

\+ + +

Featured by races for the coveted Governor's Cup for log canoes, the annual regatta of the Miles River Y. C., one of the biggest events on the Chesapeake, will be held on August 9th, 10th and 11th. All the small classes such as Comets, "Scrappy" cats, crabbing skiffs, sneakboxes, etc. will compete, as well as a large fleet of speed boats and, of course, the Stars and the Eight-Metres.

CHARLES E. LUCKE, JR.

Chicago Holds a Show

WHILE for the yachtsman the exhibits of boats, engines and boat accessories were the chief attraction at the National Boat and Sports Show held on the Navy Pier, Chicago, May 5th–12th, of hardly less interest was that portion of the exposition devoted to sporting equipment for the fisherman, camper or hunter. For, after all, your yachtsman is generally a sportsman at heart, and fishing especially makes its call whenever he is afloat.

That this Show, held over the waters of Lake Michigan, and inaugurated by Hubbard H. Erickson as a Motor Boat Show several years ago, should have developed into an exhibition embracing more than one phase of sport, is but natural. Enlarging the scope of the Show broadened its interest, and the attendance was excellent throughout the seven days the Navy Pier was opened to the public.

Chicago, being on the open waters of Lake Michigan, with the excellent cruising grounds the waters at its northern end afford, it was natural that cruisers should predominate at the exhibition. Stock power cruisers by Matthews, Gar Wood, Richardson, and other boat manufacturers were prominently displayed, as were many runabouts, and a big line of small boats for every use was exhibited by Century Boats, from the little outboard to small cruisers and boats for fishing and sporting purposes.

Russell J. Pouliot, Inc., of Detroit, exhibited one of their popular 28-foot one-design sailing yachts, and there were several other smaller boats propelled by sail.

There were not as many engine exhibits as heretofore, if one excepts the engines installed as regular equipment in the cruisers,

Launching of the new 67-foot motor sailer "Bonnie Dundee" for Clifford D. Mallory at the yard of her designer and builder, Luders Marine Construction Co., Stamford

such as Kermaths, Grays, Scripps, and the like. But there was a line of outboards to suit every need, and Budas in several models, both gasoline and small Diesel.

This motor boat exhibition is largely an educational affair as yet, for there are still many people in the Middle West who have to be shown the value of owning a boat and the fun that can be derived from one. There is no better place to drive this home than the Navy Pier, where demonstrations afloat, on the waters of Chicago Harbor, can be had, something that most other locations cannot provide. The interest this year is said to have exceeded that at any other such exhibition in Chicago.

\+ + +

Yacht Club News and Gossip

(*Continued from page 28*)

be won three times to assure permanent possession. Richard Reese, Jr., of Wilmington, won the first leg with his Barnegat sneakbox *Titia*, while W. V. Burton, of Lewes, won last year with the 10-foot sneakbox *Extra Dry*. A new method of handicapping by percentage is to be tried out in the first four races and then, if successful, used for the rest of the season.

During the winter the club lost its commodore, Richard Reese, and its fleet captain, Thomas W. McComb, of Chester, Pa., by death. Acting Commodore George E. Davisson has appointed John B. Wine, of Narberth, Pa., fleet captain for the current season.

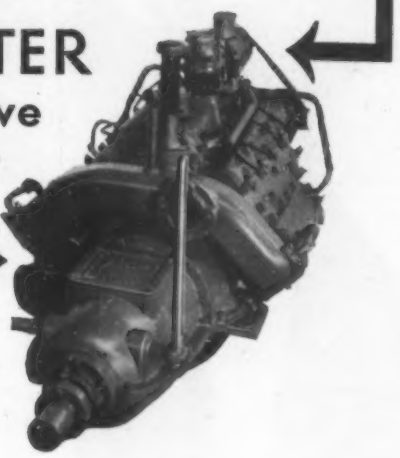
\+ + +

West Coast Cruiser Racing

The newly formed Northern California Power Cruiser Association, of which J. J. Hallenbeck of the Oakland Y. C. is commodore, has scheduled several races for the coming season. May 11th saw a race to Vallejo, another cruiser race took place on the 25th, and the race for the Shell Trophy will be run from Point Richmond to Stockton June 1st. A race from Point Richmond will be held in August and one from the Golden Gate to Santa Cruz in September. Members of the Association are the St. Francis, Marin, Oakland, Sacramento and the Stockton Yacht Clubs.

GENERATOR *and* STARTER are above water

FORD V-8 CONVERSION *by* PALMER



In converting the Ford V-8 to a 100% marine motor Palmer Bros. have changed the location of both the Starter and Generator and wiring to and from them up above the water line. The experienced boatman does not need to be told of the importance of this change. Other important features of the Palmer conversion of the Ford V-8 are:

Cast Iron Base withstands bilge water
Timber Lugs, part of the base, reduce vibration
Palmer Multi-Disc Clutch and Reverse
Exhaust is fully water-cooled
Single water outlet gives uniform temperature
Single exhaust above the water line

These many important features are what makes the Palmer conversion of the Ford V-8 the outstanding conversion of the year. It is a marine engine able to operate successfully under severe marine conditions.

$445 F.O.B. COS COB

Send for descriptive literature

PALMER
CONVERTED FORD V-8

PALMER BROS. ENGINES, Inc.
4 Hathaway Road, Cos Cob, Conn.

Dealers in all important Coastal Cities

BREAKERS AHEAD!

● **Steer clear of "Hunger Shoals"—on which many a yachting party has come to grief!**

When brows become cloudy and the first squall of temper approaches, follow this course to Comfort and Harmony:

N. N. W. to a steaming can of Heinz Home-Style Soup* . . . N. E. to a savory dish of Heinz Cooked Spaghetti* . . . and then due N. to a rich and luscious Heinz Fig Pudding*!

Ask any Old Salt. He'll tell you that no galley is too small for a full cargo of Heinz famous Foods! He'll shiver his timbers if it isn't as easy to eat well afloat as it is ashore. Just stick to Heinz and your eating problems are solved.

Tell your steward today—"Lay in a store of Heinz Foods!" Better yet, attend to the matter yourself, and make sure of the success of your next trip on the briny!

HEINZ OVEN-BAKED BEANS
HEINZ HOMESTYLE SOUPS
HEINZ COOKED SPAGHETTI
HEINZ COOKED MACARONI

**Nothing to add, nothing to fix . . . just heat and serve.*

HEINZ 57

On a specially constructed trailer, behind an automobile, this new 13-foot Herreshoff boat can be easily transported to any waters

The "Wishboom" Rig

(*Continued from page 52*)

gaff for the main trysail. We, ourselves, have been working on the idea for over ten years, and feel that there is still a great deal to be learned in its detailed application, but we are confident that the rig is fundamentally good and that further experiment will bring out its inherent qualities to the fullest extent.

It is to be hoped, in the interest of the sport, that sailing enthusiasts will not be as slow in adopting this plan as they were in casting aside the old-fashioned gaff rig for the modern Marconi sail plan.

Racing in the Large Classes in England

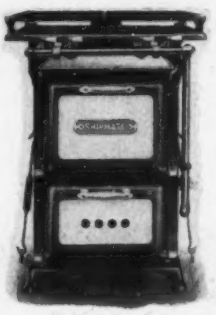
(*Continued from page 38*)

Knowing when to "kedge" and when to keep sailing is high art when racing in the Solent. To anchor and weigh ten times or more in a race is not uncommon. An American Class J racer, with all her anchors and gear normally stowed below in most inaccessible places, would be miles out of it before she could get a kedge overboard. Plenty of scope is needed, and sometimes submerged obstructions are picked up. One of the rare instances when I have seen *Britannia* disqualified was when she weighed only half of her kedge; while she went on to win, she could not be awarded the prize because she had not recovered "all her gear" used in anchoring.

In the Solent, when starting either at Cowes or Ryde, we generally race over well opened L-shaped courses in which there is usually some windward work, of a sort markedly affected by the tide. In the main, however, we are reaching. There is little spinnaker work, due both to the shortness of the legs and to tidal conditions. Tacking to leeward is seldom feasible. It takes great skill to win, and it is a grand, if tantalizing sport, in which, compared to conditions in our home waters, weatherliness and actual speed to windward are of minor importance.

Later we go to the westward, to Weymouth, Torbay, Dartmouth, Plymouth and, perhaps, Fowey and Falmouth. In most of those ports it is possible to lay better courses than in the Solent, but we are still cursed by the necessity of being a public show. At Weymouth and around Torbay fairly good triangular courses could be laid out. In both places headlands to the westward extend miles to the south'ard, shutting off the chief strength of the Channel tide. Alas, to be within public view we must start far up in the northwesterly bight of the indentations, usually in the lee of high cliffs — with westerly winds prevailing. Starts, finishes and ends of rounds are nightmares of puffs, first from the north and then from the west. "Tack when headed" is a good rule, but difficult to follow when boats on different tacks, fifty yards apart, are able to lay the same course!

In these waters race committees do attempt to lay courses by anchoring marks, usually trawlers. These craft rarely have compasses but proceed in the early morning hours to go out and anchor so many miles off Portland Bill, or Berry Head, bearing so and so. If it is clear, they get somewhere near where they are supposed to be; if thick, their guess is as good as yours. I remember one race where we picked up the southerly mark about where we thought the easterly one ought to be. Before rounding, I thought it discreet to ask if the trawler knew what mark she was supposed to be. Upon being informed that she was the southwesterly mark, we proceeded to the eastward through the murk and



SHIPMATE GAS RANGES

are the ideal cooking appliances for pleasure boats because they supply the utmost in speed, comfort, safety, cleanliness and convenience. The SHIPMATE Gas Equipment is listed by The Underwriters Laboratories Inc. It offers the latest developments in the control and regulation of cooking gas.

Full catalog sent upon request

THE
STAMFORD FOUNDRY CO.
Stamford Conn.
Established 1830

WHY
SIMMER IN THE CITY?
SUMMER BY THE SEA!

WHILE urbanites are running a temperature over the heat you may be cooling your heels on the beach at our door, reading in the smart cabanas' shade, or mixing it up with the surf. Lunch in your suit at our Surf Club Grill. Comfortable, carefree living at reasonable rates on either the American or European Plan. Special weekly rates.

Leeds and Lippincott Company

Chalfonte-Haddon Hall

ATLANTIC CITY

Make it An Occasion

with

Available in Non-Vintage and in Vintages 1923 and 1926

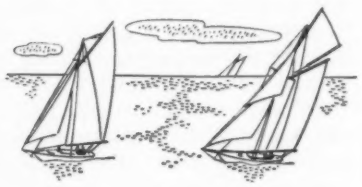
Clicquot

Yellow Label

The Finer Champagne

•

REPRESENTED IN THE UNITED STATES FOR 75 YEARS BY THE JOS. GARNEAU CO. INC. NEW YORK, N. Y.



When the Sound is Blue

DON'T force yourself to stay below all day, working in the galley — only glimpsing the water through the ports, or the sky through the companionway.

Take along a box or two of Kellogg's Corn Flakes and let that hungry crew of yours serve themselves. These crisp, crunchy flakes (protected by the inner WAXTITE wrapper) will satisfy the most active appetite on board and you'll be free to go on deck and really enjoy the cruise. Sold everywhere. Made by Kellogg in Battle Creek.

Kellogg's

CORN FLAKES

•

soon picked up the easterly mark; we rounded and beat back in a light breeze to the mark we had found just before. According to the charted position of the two marks, our speed between them was something like eighteen knots, to windward, with a foul tide and in light weather, but, as we were the only boat that found the marks and won with ease, we made no comment. Were it not for the public, the courses at Weymouth and in Torbay, with starts and finishes moved miles to the eastward and with each leg properly logged, would give fair tests of speed.

After Torbay, where races are held at Torquay, Balacombe, Brixham and other places, but all in about the same water, the racing fleet goes to Dartmouth, probably the fairest course of all. After the Dart the racers go to the charming town of Plymouth, with the worst courses of all, not even excepting Cowes. Starts and finishes are under high cliffs in a port crowded with big ships and naval vessels. The races are several times around little triangles in which a breakwater across the mouth of the harbor plays a prominent part, as it must be enclosed in the course both coming and going. To round the outer marks the yachts go out to the Eddystone and into the full strength of the Channel tides.

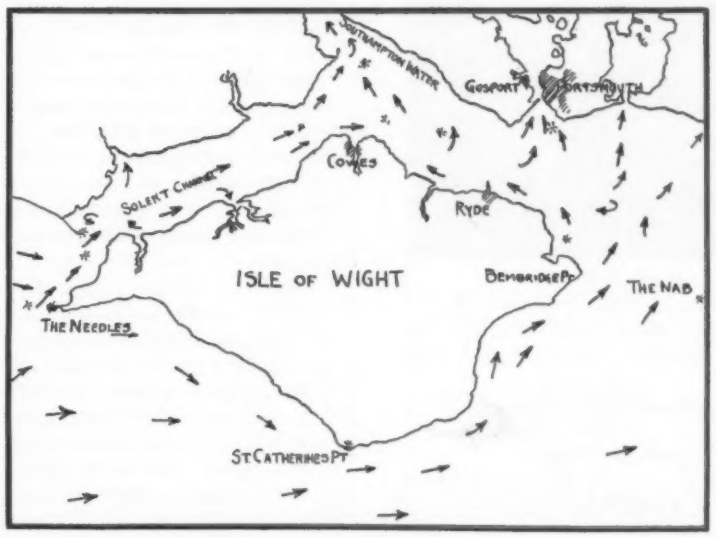
Later, if everybody has not quarrelled too much with everybody else, and if the normal "also rans" are not disgusted with fattening the string of winning flags of the usual winners, we may get to Fowey (pronounced Foy, like Eddie of theatrical fame) and Falmouth. Both are charming places with pretty fair courses.

Such is the normal British circuit in the years when the Clyde, Irish and French regattas are ignored. It gives about two months of marvelously interesting and variegated racing. It blows, and rains at times like hell, and sometimes it is extremely light and fluky. If one can take it as it comes, the good with the bad, and not be too keen about winning, ignoring as far as possible technical protests and personal animosities, it is grand sport. If *Yankee's* visit can be kept free from the international ballyhoo with which the press of our respective countries will try to surround it, and be looked upon as the sporting effort of an American yachtsman to participate in the summer's racing as the British have known it year after year, it should do international yacht racing an enormous amount of good.

\+ + +

Postscript. The foregoing was written while I have been laid low with pneumonia in a hospital in Nassau. I am convalescent now and, as I reread my scrawl, I fear I may have been too frank and too critical.

Yet I hope that, in spite of the "digs," my British friends will remember that I return to the Solent, Cowes and racing to the westward every season that the chance presents itself. Racing there has infinite variety and charm, and nowhere else in the world is the basic intent of our racing rules more carefully interpreted. Customs, usage of language and inability to see another's viewpoint, at times lead to differences of opinion. Such must always be the case, not only in international competition, but in any sport, even among fellow countrymen. Where years of keen strife have evolved complicated rules, the underlying implied principles are frequently forgotten in the legal interpretation of poorly or loosely worded phrases.



This chart shows the intricacies of the tidal currents around the Isle of Wight, where "Yankee" will be racing this summer. The currents change every hour, but the diagram shows only what may be expected two hours before high water at Dover

KODAK DUO

Miniature camera advantages *plus* a larger picture

★ **Enjoy all the thrills of true miniature photography — yet get a larger picture. Make "candid" pictures . . . snap people off guard . . . catch fast action.**

With the high-speed Kodak Duo Six-20, there's no need for posing. The crisp, keen *f*.3.5 anastigmat lens lets you make pictures in almost any light—even at night, when aided by Kodak "SS" Film and Photoflood bulbs. And the Compur shutter's eight speeds—from 1 to 1/300 second—give you an instant answer to every exposure problem.

★

KODAK DUO SIX-20 brings you all the advantages of a true miniature camera, yet it takes sixteen album-size pictures—1⅝x2¼ inches—on a single roll of 620 Kodak Film.

With built-in depth-of-focus scale . . . optical eye-level finder—Kodak Duo Six-20 costs $52.50. At your Kodak dealer's . . . Eastman Kodak Company, Rochester, N. Y.

ONLY EASTMAN MAKES THE KODAK

The choice of those who know

7X BINOCTAR model
The ideal marine glass

ZEISS BINOCULARS

"There is nothing finer than a Zeiss." Many yachtsmen, masters of ocean liners and officers will tell you this. They know from *experience.*

Zeiss Binoculars are standard service glasses in the U. S. navy.

Their high optical quality is the result of constant research and improvement, plus nearly a century's experience in the making of fine optical instruments. Zeiss standards of craftsmanship and the use of Jena optical glass, noted for its light transmitting properties, also contribute to the superiority of Zeiss Binoculars. Strong dust- and moisture-proof construction assures a lifetime of service in any climate.

Models of 3 to 18 power. At leading dealers.

Write for Literature

CARL ZEISS, INC.
485 FIFTH AVE., NEW YORK, Dept. TC
728 So. Hill Street, Los Angeles

CARL ZEISS JENA

Zeiss Ikon Cameras

New, improved models take photos impossible with conventional types—unposed "candid" pictures, and shots at night under ordinary artificial light. Critically sharp negatives; splendid enlargements to remarkable size.

Focus automatically.

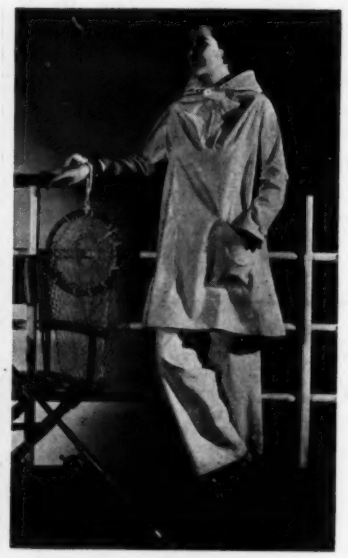
Contax, shown above, takes 36 pictures on single load of cine film. Speeds up to 1/1000th sec.

Strikes a New High in Nautical Wear

Seascape

SAILING SUITS
of
WAMSUTTA SAIL CLOTH

In Colors to Match Your Sails



THE smartest sea-going rigs you've ever seen afloat or ashore, and "the top" for utility. Fashioned from windproof, water-repellent Wamsutta Sail Cloth. Rustless Talon Fasteners; a hood with drawstring for dirty weather. And the pockets have scuppers!

The combination illustrated is the "Stormy Weather Shirt" and Slacks, as swank as it is practical. Other models include the "Original Seascape" suit, the "Dinghy Shirt," and the "Culotte Skirt."

Seascape Shirts and Slacks for men are also available.

Write us for details and name of nearest dealer

B. F. MOORE & COMPANY
Newport, Vermont

Christopher Columbus

(*Continued from page 45*)

From these considerations, it would appear that what is required in a replica of the *Santa Maria* is an underbody which could be pushed up to a speed of about ten knots, could give 5,344 cubic feet of cargo space, and could accommodate 39 souls and a sea cook in considerable discomfort. No one, I hope, will endeavor to construct an expensive model on the figures I have given; I am sure they need correction by a committee consisting of a practical seaman, a naval architect, a shipowner, a stevedore and perhaps a schoolmaster. When they have come to some agreement, doubtless they will submit their plans to the Society for Nautical Research, the society which, beginning with a small band under Carr Laughton some twenty odd years ago, has since developed under Geoffrey Callender's secretaryship into an international body of naval archeologists. We can then hope to get within an inch or two of the proud ship which carried brave Christopher Columbus across the Western Ocean and to America.

Why Doesn't She Go Faster?

(*Continued from page 67*)

system and interesting things happen. If two crests come together, a big one is built up; if a crest and a hollow coincide, the surface flattens out. This has a decided effect on resistance and explains the reason of "unfavorable lengths." At certain speeds, a 50-footer will drive almost as easily as a 40-footer, for example.

As the speed increases, the lengths of the waves, from one crest to the next, become greater and the bow wave system shifts aft, wave length depending on speed. This alters the interaction of bow and stern systems and affects the resistance. As the boat travels ahead, the waves she piles up diverge continually, taking with them the energy put into them by the boat. As the speed goes up, more and more power is required to overcome this wave-making resistance until, at high speeds, it is the major factor.

Early engineers and naval architects did some experimenting on resistance, Robert Fulton towing simplified models, but the pioneer in evaluating a ship's resistance was William Froude. He developed the Law of Comparison as applied to ships and made many towing experiments in the model tank and followed them up with the famous tests on the *Greyhound*, in which he demonstrated that ship and model act alike at "corresponding speeds." This was in the Seventies of the last century.

Much of our knowledge of wave making resistance today, in this country, at least, is based on the painstaking work carried on for years by Rear Admiral D. W. Taylor, formerly Chief Constructor of the Navy, in the model basin at Washington. For more than 25 years he made a series of tests, in the intervals between his regular work of towing models of the proposed naval vessels and work for outside designers, and freely published the results and his conclusions. These tests were made on a set of models derived from a "parent form," length being kept constant, and beam, draft, prismatic coefficient and displacement being varied. The models were towed at different speeds and the total resistance measured with great accuracy. The frictional resistance of each model was calculated for every speed at which she was towed. This, subtracted from the total for that speed, gave the residuary resistance which was practically all due to wave making. From these figures he plotted a set of curves showing the residuary resistance in pounds per ton of displacement for a wide range of speed-length ratios, displacement-length ratios and prismatic coefficients. Using these curves, and knowing the length, displacement, prismatic coefficient and wetted surface, the naval architect can, even in the early stages of a design, calculate a boat's resistance and, hence, the necessary horse power, at any speed. He can thus, without guesswork, predict power and speed and can find the most economical speed for a proposed design or, perhaps more important, can show an owner the economy of increased length.

The curves show also the influence of the prismatic coefficient, for at certain speeds and displacements, an increase of this coefficient, say from .55 to .61, will double the wave-making resistance, while at higher speeds a similar increase will reduce it some 12 per cent. This bears out what I said above: that a motor boat should be designed for the speed at which she is to run or her power may not be used efficiently.

Let us take a concrete case. Consider an old time "launch" 52 feet water line, 10 feet beam, 2 feet 11 inches draft and 13.72 tons displacement. Her prismatic coefficient is .576 and her wetted surface

about 417 square feet. At five knots, the frictional resistance is 76 pounds and that due to wave-making but 13.6. At seven knots the figures are 141 and 61, while at nine knots they are 222 and 346. Above that speed the wave-making resistance climbs sky high. Taking percentages, at five knots the frictional resistance is 85 per cent of the total; at seven knots it has fallen to 69½ per cent, while at nine knots it is less than 40 per cent. At that speed wave-making is a serious factor and the boat could not be driven much faster without tremendous waste of power. In fact, her economical speed is not much above eight knots. It takes but half the power to drive her at seven and three quarters knots that it does to push her along at nine, and most of this difference is due to the wave-making resistance. That extra knot and a quarter is decidedly expensive in power.

Sail boats make waves, too, though in them the problem is complicated by heeling and leeway. When driven hard, a short, chunky boat rolls up a system of waves, particularly off the quarter, that uses up a lot of the power derived from the sails.

As the speed goes up, there is usually a change of trim, the boat settling by the stern. This is disturbing to many owners but is, as Taylor points out, an effect of resistance and not a cause of it. But when you see a motor boat tearing along with her bow up and her stern down, you will know that she is being driven too fast for her model and that a lot of her power is being wasted in wave-making. Eighty years ago, Griffiths, designer of clipper ships, said that he could conceive of few performances less economical than pushing or pulling a wave all the way across the Atlantic Ocean!

Streamlining

(*Continued from page 54*)

portion of her 6,800 hp. was needed to neutralize the effects of resistance forward and the drag of the cockpit and transom aft.

The possible limit of hydroplane speed may be around 150 m.p.h., considering planing ability, weight and power. At this speed 27 hp. is required for every square foot of unstreamlined area directly exposed to the wind, giving emphasis to the need of thoroughness in streamlining at high velocities.

It is quite likely that express cruiser speed will be increased in the coming years and streamlined designs will help materially. That a 60-mile-an-hour express cruiser would be in demand, not only for commuter service but for extended pleasure cruising as well, may be taken for granted. First cost and running expenses of such a boat will, of course, be high.

Cabin layouts differ with the preference of owners, making it difficult to arrive at any degree of standardization. The design shown in Fig. 9 is of the bridge-deck type, with cabins forward and aft. The deckhouse is a modified tear-drop section, superimposed on the long streamlined trunk which forms the double cabin. Funnels, masts, searchlights and ventilators are all speed retarders, even when streamlined. Hatchways and portlights should be flush to avoid protuberances, which serve as wind deflectors. The smoother the surface passing through the air, the less the friction and resistance.

The knife-edge bow will have to give way to a rounded effect at the deck, the curve decreasing in radius as it nears the water line. It may be that the re-introduction of a modified clipper bow will not only be pleasing in appearance but also serviceable. If we are to believe the old salts, there never was a better type of bow than that of the clipper, shipping less water in stormy weather than does the modern steamer with her high freeboard. That there is some substance to this claim is evident from the fact that the United States Navy has adopted a modified type of this bow on the later battleships.

"Squatting" (settling at the stern) is an inherent fault of the displacement boat when driven at high speed. It seems logical, then, that the fast express cruiser of the future will be of hydroplane design.

Streamlining is not a fad, here today and gone tomorrow. It has a scientific basis, resting on a mass of experimental data.

Note: Streamlining is not a panacea for the entire elimination of resistance but a means of reducing it by the suppression of "humps and hollows" or of needless protuberances or other factors of air resistance. A perfectly streamlined body will still encounter resistance to motion, especially if the speed-length ratio be high. It must be remembered, too, that a boat travels in two media, water and air. Fish and birds travel in only one. Even so, they meet with resistance. We must not think that streamlining abolishes resistance; far from it. A perfectly streamlined hull will still encounter frictional resistance and will still make waves. The waves around a hull in motion are caused by alteration in pressure of the water flowing around the hull, due to changes in velocity of the filaments of water as they alter direction. As for air resistance, this is serious only at high speed. [*Editor.*]

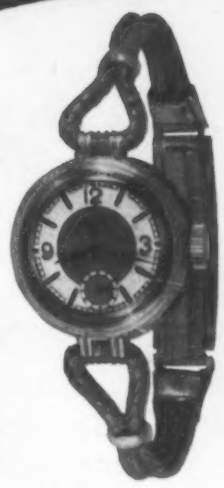
ESPECIALLY CREATED FOR YACHTSMEN!

New **OUTDOOR ELGIN**

It's spray-proof!

"For years I have been aware of the need for an accurate timepiece like this, protected against dampness. It gives me pleasure to present the Elgin Sport Watch."

T. ALBERT POTTER, Skipper of "*Revenge*"
President, Elgin Natl. Watch Co.



● Modern scientists and Elgin's master craftsmen have worked closely together to build this new watch! It has been proved *right* under test conditions more severe than those of actual use. Spray-proof. Available in non-magnetic stainless steel or gold filled case. Unbreakable crystal. Accurate as the dog star! See the Elgin Sport Watch at your dealer's now. The Elgin National Watch Company, Elgin, Illinois.

Important: No watch can stay moisture-proof permanently without attention! Be sure to have your dealer check your Elgin Sport Watch once a year and renew the anti-moisture barrier of oil.

15 jewels, unbreakable crystal, luminous or plain Arabic dial. No. 1802, non-magnetic stainless steel case, strap, $25. No. 1801, 10 K. gold filled case, leather thong, $32.50

30′ 6″ x 25′ 6″ x 9′ 6″ x 4′

MATHIS

offers this standardized auxiliary cruiser, providing accommodations for four persons, built throughout to their well-known high standards of construction.

● The design embodies all improvements possible after building and sailing similar types, and is thoroughly tested.

● Complete seaworthiness combined with excellent ability on all points of sailing have been achieved. The 20 h.p. motor, located beneath the large self-bailing cockpit, driving through a 2:1 *reduction gear* gives a speed of eight miles in smooth water.

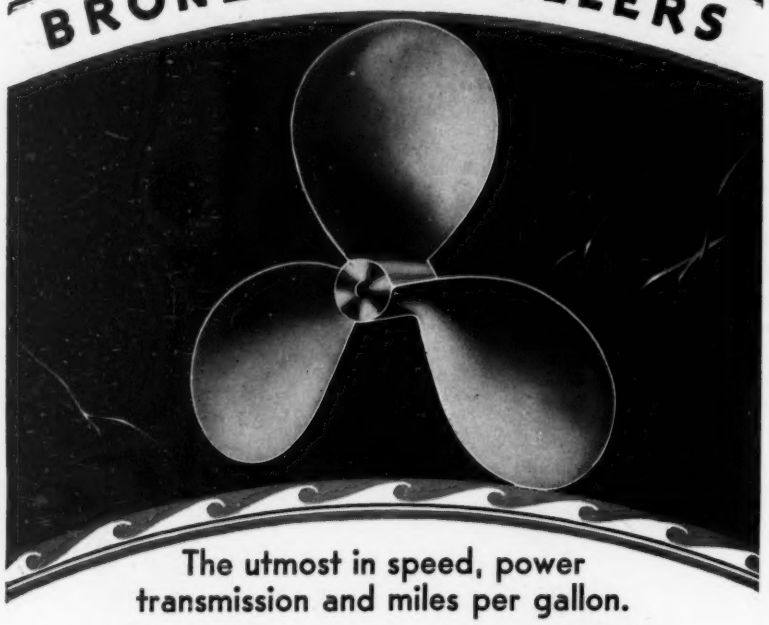
The remarkable response to the announcement of this new auxiliary cruiser indicates that this type answers the requirements of many yachtsmen

Come to our yard and see them building, send for descriptive literature, or ask for a representative to call with full details

MATHIS YACHT BLDG. CO.

Camden, New Jersey

COLUMBIAN
BRONZE PROPELLERS



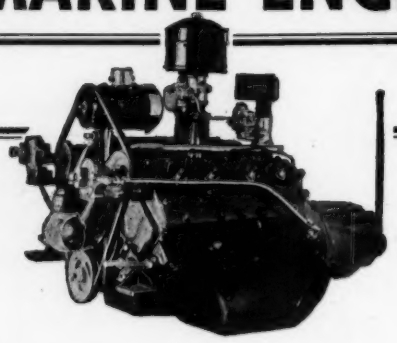
The utmost in speed, power transmission and miles per gallon.

Columbian Fittings for those who want the best

The Columbian Booklet free on request

THE COLUMBIAN BRONZE CORP.
Member, Marine Propeller Manufacturer's Assn.
236 North Main St., Freeport, L. I., N. Y.

V8 MARINE ENGINES



MODEL HC-35
(As Illustrated)
Suitable for hulls from 19' to 35', including runabouts, skiffs, auxiliaries, cruisers and tenders. Fully salt water equipped, Joe's Reverse Gear, water cooled manifolds, etc.

MODEL RV-40
Special V8 Ford Engine for 225 cu. in. racing hydroplanes. Light weight, powerful, compact. Power curve compiled under actual dynamometer test now available.

Conversion Parts and Supplies

Send for full information and Illustrated Catalog

LEHMAN MARINE ENGINEERING CO.
972 Broad Street, Newark, N. J., U. S. A.

Under the Lee of the Longboat

(Continued from page 65)

course. All the fun-loving Vikings were so busy crowding one another at the start that they failed to see the new signals and sailed around the wrong way. Only one competitor — a stranger — sailed the proper course, and as he had to make two beats and a run of it he finished long after the local boys, who had reached all the way around. Well, the race committee found itself in a hot spot when it came time to hand out the prizes, because the worst politician in the club had finished first, the next most dangerous second, etc., while the stranger who sailed the proper course and was entitled to first prize didn't rank politically any higher than a visiting fireman. In this dilemma the committee members handled themselves with innate good taste and masterly strategy. They could, of course, have disqualified the Vikings, or they could have sequestered the prizes, melted them down, and divided the cash proceeds among themselves. But neither alternative was considered ethical by the Lee Rail Vikings. What they did do was award the regular prizes to the Vikings and donate a special trophy to the stranger. He told me all about it.

What About That Electric Drive?

(Continued from page 62)

lubricated only every two years. No other attention has been necessary. The engine room has been separated from the living quarters by a 4-inch, cork filled, bulkhead which provides sufficient sound insulation so that the engines can be heard in the cabin only as a humming sound. In the deckhouse or on deck it is literally impossible to tell whether they are running or not. This disposition of equipment leaves the entire hull from a point six feet abaft the foremast to the cockpit entirely free from smell or objectionable noise. The only sound in the cockpit is the turbulence of the propeller.

The most desirable part of the average auxiliary schooner for living quarters is that part which has the greatest beam and is most accessible to the cockpit. This is generally rendered disagreeable by the noise and odor of an internal combustion engine. All sorts of space concession is ordinarily made to its installation, and, even then, accessibility is sacrificed. In *Mahdee* the best part of the ship is available for living quarters, silent, clean and odorless.

The qualities which were sought in *Mahdee's* power installations were:

1. Best possible disposition of space
2. Silence
3. Reliability
4. Economy.

Of number three I can say only that, after the problems of inadequate installation were worked out the first year, *Mahdee* has been completely reliable—in fact, so reliable that we never even think about the matter. The care and operation of the equipment has been handled by a Swedish captain who had been with me before *Mahdee* was designed and who had had no previous electrical experience.

On the score of economy, I am inclined to think that it is good performance to move a vessel displacing 58,000 lbs. at 7.5 or 8 knots (depending on wheel) on a gasoline consumption of 4½ gallons an hour. This is an accurate figure based on several 12-hour runs under power alone. Much of the credit should go to Mr. Crocker for the easily driven hull form.

If I build another auxiliary she will have electric drive, even if the hull is far smaller than *Mahdee's*. I believe that the theoretical disadvantages of electric drive are more than offset by the advantages which I have enumerated.

The disadvantage of excessive first cost can be largely overcome. In doing it again I should stick to one voltage, 110 volts, which would greatly simplify the switchboard. I should have only enough battery capacity for starting and lighting, without attempting to provide for propulsion by battery. I should use a standard 1750 r.p.m. electric motor driving through a 3 to 1 reduction gear. When *Mahdee* was built, reduction gears had not been developed to their present degree of silence and dependability. Last, but not least, I should install a single, standard, farm lighting generator set with the heavy cast iron base removed. By keeping the radiator, and by circulating fresh water, all hull fittings and most of the attendant corrosion due to circulating salt water would be eliminated. It would be possible to use the fan for an air circulation duct from the deck, led in through a water-trap ventilator. By using a single unit instead of two, it would be possible to install it amidships, thus keeping the weight lower in the hull than with two sets. I believe the first cost of generator set, motor, reduction gear and controller would compare favorably with the first cost of a high grade gasoline engine and reverse gear working through a reduc-

tion gear. Wiring would be extremely simple, the controller an ordinary rheostat. I believe that resistance grids could be entirely eliminated.

The efficiency and economy of a gasoline engine depends on its being operated at a constant speed and at a load within its capacity. When the engine is connected to a generator and the throttle is controlled by a governor, the engine operates under conditions most favorable to fuel economy and to long life. The lighting sets on the market today have demonstrated their reliability. Radiator-circulated fresh water would make for more efficient operating temperature of the engine. Corrosion would be minimized by suitable ventilation. Absence of hull fittings would contribute an added factor of safety.

The exhaust system in *Mahdee* is an improvement which I would apply to any type of boat. The dry pipe which leads the exhaust from the settling tank to the deck before it enters the hollow mast carries the exhaust from twelve 3-inch cylinders, yet they are almost inaudible. Trials were run before the masts were stepped and the electrical output was carefully recorded. Subsequently, when the dry pipe was connected to the mast, the electrical output was increased by two amperes. This was caused by the draft up the mast eliminating some atmospheric back pressure. Rain which enters the masthead when the engines are not operating simply runs down into the settling tank, in which the level of water must always be constant.

Some trouble was experienced in adjusting *Mahdee's* compasses for deviation because of the electromagnetism in the ship. A set of three deviation cards was finally worked out, one to be used at full speed under power, one at half speed, and one to use under sail alone. Three similar cards were provided for the standard compass. A careful check each year has proved that these deviation cards are still accurate.

It is not necessary to have electrical knowledge to operate or maintain an electric drive installation. The only parts which need to be carried are a few spare fuses. The engine part of the equipment should give less trouble than in a normal installation because of its constant, governed speed. Reverse gear or clutch trouble is definitely eliminated.

Flexibility, reliability, economy and silence aft when silence is wanted are all practical accomplishments. What more can you ask of an auxiliary installation?

Across the Bay to Vigo

(*Continued from page 69*)

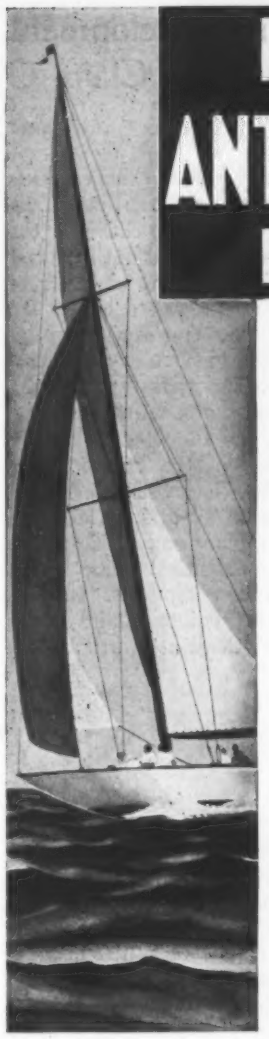
thrusting our passports before his eyes and smiling our special diplomatic, customs officer smile that we have practiced for just such occasions. To our relief he beamed graciously, refused to glance at our passports and airily waved to us the freedom of Spain. We backed out of his presence, muttering *gracias* and *buenas noces*, or utterings that sounded like that, and made straight for a café where we drank to the prolonged health of the *aduano* of Corcubion. God bless him! Long may his big jib draw!

We spent the next day at anchor, but a fresh nor'easter and an expiring insurance policy that covered us as far as Vigo sent us spinning southwards once more the following morning. It was fifty miles to the entrance of Vigo Bay, and with two reefs in our main we did it in seven jolly hours. What a glorious sail! A brilliant sun, a blue and white sparkling sea, tight bellying canvas, a brave little ship and a coastline panorama as colorful and varied as one could wish. As we sped into the quieter waters of Vigo Bay we were sorry that that romp had ended.

With its six-mile mouth sheltered from the restless Atlantic by a line of straggling islands, this premier bay of Spain affords a spacious, protected harbor. The high surrounding hills close slowly in on either side, leaving a narrow gorge of some seven miles to join the bay with that of the beautiful San Simon. The north shore is indented with little curving bays and wriggling inlets that run to the feet of the bosoming hills. In the evening sunlight this was all very pleasing as we headed for the terraced city of Vigo where, in somber blues, pinks and yellows, the old balconied houses mounted the hill.

From the water, as so often cities do, Vigo appeared most attractive. In certain respects we later found it so — a city of quaint old buildings and twisting alleys; musical cafés; glorious senoritas; a parrot house of a market. But there was one thing that turned us against it. To be candid, it smelled. Each and every street had its own objectionable odor. A blind man with a good sense of smell could never be lost there; even we came to recognize streets by their smell. But enough. We had reached Vigo. We had come through the temper of the Bay and could now look forward to more peaceful sailing on our way to the Caribbean. The first step and the worst step was over.

So we played further with our pet, the squaresail, and thought longingly of the trades.



MARBLEHEAD
REG. U.S. PATENT OFFICE
ANTI-FOULING GREEN
BOTTOM PAINT

It is a **Powerful Preventive** of Marine Growth, Barnacles and Borers. Has no equal in warm and tropical waters as a protection against *destructive Teredos.*

EMERALD—LIGHT GREEN
CREAM WHITE
A Hard Finish Racing Green by Special Order

John G. Alden — I have used your Marblehead Anti-Fouling Green Bottom Paint on my own schooners, Malabar I to X, and on my better grade yachts. It is most satisfactory both from a racing and cruising standpoint.

Belknap & Paine — We have specified Marblehead Green Bottom Paint for all wooden yachts from our design for a number of years past, to our entire satisfaction.

Burgess & Donaldson — Invaluable for racing and cruising.

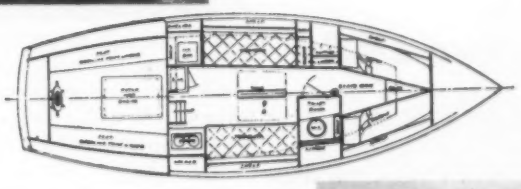
Cox & Stevens — Used largely on vessels with which we have been connected, and has always given complete satisfaction.

Henry J. Gielow — As near 100% perfect as possible.

STEARNS-McKAY MFG. CO.
Marblehead, Mass., U. S. A.

Alden Motor Sailer
Sail One Home

A few Alden Motor Sailers are ready for delivery. Ask for a demonstration and then sail one home. Actual trial runs have shown a speed of 9 miles per hour under power and a remarkable ability to beat to windward under sail in light or strong airs.



SPECIFICATIONS: Spacious accommodations, 4 berths, toilet, ice box, alcohol stove, sink, 6′ headroom, large cockpit. 32′7″ x 28′10″ x 11′ x 4′2″.

Completely equipped . . . $4150

John G. Alden
131 State St., Boston, Mass.
Branch Office:
220 Broadway, New York City

LEICA PHOTO BY ANTON BREUHL

The candid camera that

Takes unposed snapshots in the cabin or on deck—Shoot your friends in the light of the cabin lamps or in the blaze of the midday sun.

•

Takes natural color snapshots with Leica Dufaycolor film, without any extra attachments. For $3.00 you get a roll of 30 exposures.

•

Gets action—Shutter speed up to 1/1000 of a second and an f:2 Summar speed lens! You can catch a diver in mid-air, or a speed boat flashing by.

•

Is a miniature pocketful of fun—easy to operate—and always ready to catch all the high spots of your summer.

•

Combines precision with simplicity. Leica takes pictures for you almost automatically under all conditions. Sharp, clear enlargements can be made over 12x18 inches.

•

Learn more about this modern marvel of photography.

Cat's Eye LEICA

CAT'S EYE
LEICA

Model F with f:2 Summar Speed Lens

PRICES START AT $99 • U.S. PATENT NO. 1,96C,044

E. LEITZ, INC. DEPARTMENT 37
60 EAST 10th STREET • NEW YORK CITY

Please send me the illustrated booklets
About the remarkable Cat's Eye Leica ☐
About Leica Dufaycolor Film ☐

NAME_____

ADDRESS_____

The Development of the Interlake and Pointe Claire One-Design Classes

(*Continued from page 71*)

St. Louis. The crews changed boats after each race and total points decided the winners. So close was the racing that it was not until the last boats finished in the eighth race that the series was decided, the North Hatley crews winning by two points. Five races were tied on points. The series was a great success and did much towards establishing the 19-footers.

The class at the Pointe Claire Yacht Club has been developed strictly as a one-design class, the class rules, plans and specifications calling for identical sails, spars, rigging and equipment. In this respect the Pointe Claire boats differ from those at North Hatley and in New York State where the hull lines, working sails and minimum scantling restrictions are strictly one-design, but there is a lot of room for individual initiative in the selection of rig, spars and equipment.

The two sets of rules represent two differing ideas as to the best methods of developing the class; each has been drawn up best to serve the needs of its particular club and district. Everywhere that the Interlakes and P. C.'s are used they have been popular and can be recommended as fine, able little boats which will give any amount of good sailing and stand many years of hard use.

Who Was Right?

(*Continued from page 64*)

The object of Rule 29 (7) when read in conjunction with Rule 30 (C) is to prevent a yacht which overtakes and elects to try to pass another to leeward from being forced unduly wide of the next mark.

When *B first ceased to be clear ahead* (*cf.* last sentence of Rule 30 (C)) she was carrying her main boom to port. Until the yachts reached Mark 2 that mark was "the next mark" (Rule 29 (7)). After the yachts jibed around Mark 2 overtaking-to-leeward conditions technically continued because the yachts had neither tacked nor drawn clear as provided in Rule 29 (6). Mark 3, therefore, became "the next mark" within the meaning of Rule 29 (7). There still existed a proper course for *B*, *viz.*: a straight line for Mark 3. Paradoxical as it may seem, *B's* lee side *for the purpose of the overtaking rule* 30 (C), continued to be her port side, although as a physical fact it then was her windward side. *B* had the right gradually to bear away (luff) to her proper course for Mark 3, but had no right to bear away (luff) beyond that point (*Su Su* vs. *Endrick, ubi supra*).

There is in the rules, as worded, nothing to differentiate between a jibe involving a slight alteration of course and a jibe involving a change of course equivalent to or greater than a tack, *i.e.* substantially 90° or more in the case of small yachts. Were such differentiation read into the rules, the door would be opened wide to argument as to the approximate number of degrees of a circle involved in any particular jibe. Obviously, that is a question of fact often impossible to determine.

Now, how do the adherents of viewpoint I answer *B's* contention that Rule 30 (B) governed the case after the jibe around Mark 2?

Their argument is as follows:

a. Clause (B) applies only "If the overtaking yacht steers a course to pass the overtaken yacht on the side opposite to that on which the latter then carries her main boom. . . ." They contend that the word "then" refers to an instant or period of time during which the overtaking yacht is still clear astern.

b. Obviously to "steer a course to pass the overtaken yacht" either to windward or to leeward, the overtaking yacht must at that time be clear astern. She may elect which course to pursue. Once she establishes an overlap — to leeward in the instant case — she no longer has a free choice of course. *B's* right to alter course thereafter becomes restricted by Rule 29 (7) and Rule 30 (C) and (K). The question of overlap is material in three ways only:

1. It definitely determines the particular clause of the overtaking rule which thereafter governs the case until the yachts tack or draw clear as provided in Rule 29 (6).
2. It qualifies *B's* right to luff should she jibe after the overlap is established.
3. It entitles *A* to room at the mark as inside yacht.

II. Rule 30 (A) and (B) Governed

The words "proper course" may be found but twice in the Sailing Rules, *viz.*, in Rule 30 (C) and in Rule 29, Definitions (7). They apply only if and when overtaking-to-leeward conditions exist (*Alerte* vs. *Freida*, N.A.Y.R.U., 1932, Dec. 12,

The modern
KELVIN-WHITE SPHERICAL COMPASS
again guides the
PILGRIM

Last year the schooner PILGRIM returned from a two-year cruise around the world. Last month she started another voyage.

The KELVIN-WHITE SPHERICAL COMPASS, on which her crew relied for guidance on her previous 30,000 mile cruise to unusual, little-traveled places on the "seven seas," still guides her — a fine tribute to the instrument on which so much depends.

Her navigator reported wonderful steadiness in all kinds of weather, through storms in the Atlantic and Pacific and the well-known dangerous steep seas of the Mediterranean.

The modern KELVIN-WHITE SPHERICAL COMPASS is installed on hundreds of yachts. Write for our descriptive folder containing the endorsements of many satisfied users.

KELVIN-WHITE CO.
112 STATE STREET, BOSTON
38 WATER STREET, NEW YORK

First Line
PROTECTION

SUBMARINES FOR THE NAVY—TARR & WONSON'S COPPER PAINT FOR WOODEN BOTTOMS

Like a submarine, Tarr & Wonson Copper Paint is intended for under water service. Both are found in the first line of defense. Both must be reliable, efficient and built to "stand the gaff".

For over 71 years, Tarr & Wonson has been a name known to seamen and boat owners as representative of the finest protection for wooden bottoms. Copper paint bearing the genuine label of our company is sold in every important coastal region of the world.

We have kept faith with our users by maintaining the high copper content of our paints. First line protection for your boat bottom is a fact when you paint it with Tarr & Wonson.

TARR & WONSON COPPER PAINTS

Three Colors
- **BROWN COPPER PAINT**
- **RED RACING COMPOUND**
  (for fast slippery bottom)
- **GREEN COPPER PAINT**

TARR & WONSON, LTD.
Gloucester, Massachusetts
Fine Copper Paints since 1863
also a full line of topside paints and spar varnish

Herreshoff

Our Engineering staff has been experimenting for the last decade with the so-called Wishbone Boom. Actual test boats have been constructed and tried out under various weather and sea conditions. Now, confident that its development is a distinct advance in the science of sail design, we offer this latest Herreshoff creation to our clients on their One Design Class Boats at no extra charge. Boats now equipped with the old Marconi or gaff type rig may be modernized by the adoption of this sail plan.

Literature on the new
HERRESHOFF
AMPHI-CRAFT
is now available

BRISTOL RHODE ISLAND

QUALITY
Munro Motor Sailers

have long been distinguished for their high quality and superior performance. Designed and built for yachtsmen who require the best. All sizes.

The New Munro Sailer
Accommodates four. 27½ feet of high quality at new low price.

GORDON MUNRO
FAIRHAVEN MASSACHUSETTS

Appeal No. 2). They are used only to define a course to leeward of which a yacht overtaken to leeward may not bear away to hinder another passing to leeward. It follows that on reaching Mark 2, *A* might have maintained her then course indefinitely, and *B* had no right arbitrarily to bear away to the following mark (Mark 3) regardless of the presence of *A* overtaking her to leeward.

In the British cases (*Nyria* vs. *White Heather*, and *Su Su* vs. *Endrick* heretofore cited) *only* the leading (overtaken) yacht jibed and then luffed. They are authority, therefore, only for the doctrine that if the overtaken-to-leeward yacht jibes and luffs after the overtaking yacht establishes an overlap, such alteration of course constitutes an illegal bearing away out of her proper course for the next mark in order to hinder the overtaking yacht passing to leeward; provided always that the overtaking yacht does not jibe voluntarily.

The proponents of viewpoint II admit that the two British cases are good yachting law and that if, after an overlap has been established to leeward, the overtaken yacht jibes and luffs to such an extent that the overtaking-to-leeward yacht in order to keep clear is herself forced to jibe, such a forced jibe should not abrogate Clause (C) of the overtaking rule which governed the case at the time the overlap first was established.

In the instant case, however, *A* deliberately, and on her own initiative, voluntarily jibed around Mark 2 and became, in fact, the weather yacht. It seems only fair that *B*, after jibing also, should have some means of defense from being blanketed and passed to windward. Her only defense is luffing. None of the four acts or conditions enumerated in Rule 29 (6) have occurred. Overtaking conditions still exist. The only clause of the overtaking rule applicable is Rule 30 (B).

The situation is one which does not seem to be covered by the Sailing Rules. There was a substantial and voluntary alteration of course by both yachts. To acquiesce in *A's* contentions, Numbers 2, 3, 4, 5, 7, 8, 9 and 10 might permit of situations which not only would be contrary to the principles of fair sailing implied by Rule I, but might lead to much confusion in the actual sailing of yacht races. Therefore, when *A* voluntarily and, on her own initiative, deliberately jibed, the best interests of yacht racing as a whole will be better served by ruling that the yacht overtaken to leeward (*B*) became the yacht overtaken to windward, and the yacht overtaking to leeward (*A*) became the yacht overtaking to windward, with the rights and obligations of each yacht governed by Rule 30 (A) and (B) *after* the jibe by both yachts, instead of by Rule 30 (A) and (C) as theretofore.

They believe, however, that a sudden luff by *B*, simultaneously with or immediately after the jibe, and before *A* has an opportunity to trim sheets and square away on her new course would not be fair sailing. In other words, that Rule 30 (B) should not become applicable until both yachts are under proper control on their new course.

III. A New Situation Arose; Overtaking Terminated; Rule 30 (G) Governed

Those who view the situation from viewpoint III agree with practically all the contentions enumerated in II with one exception, *viz.*, that after the jibe Rule 30 (B) governed the case. They claim that *both* yachts have made a substantial alteration of course with new wind conditions which clearly indicate that *A* is windward yacht. Common sense, therefore, dictates that Rule 30 (C) can no longer apply. Rule 30 (B) cannot apply because at the time of the jibe *A* is not clear astern of *B*, and, therefore, the only rule that can apply is Rule 30 (G). It follows that *B* may luff in a manner to which *A* can easily respond, and, as windward yacht, *A* must keep clear.

Furthermore, it would be most unfair to hold that Rule 30 (B) became applicable. In the ordinary case of overtaking to windward, the overtaking yacht should be careful to sail a course sufficiently to windward of her adversary to be able to respond to a sharp luff. In the instant case, *B* need only allow *A* sufficient room to keep clear both of the mark and *B*. The election as to the distance between the yachts in rounding the mark rests with *B*, *not* with *A*. It is conceivable, therefore, that after the jibe around the mark the yachts will be so close to each other that it would be physically impossible for *A* to keep clear of *B* in the event of a sharp luff by the latter.

Now let us consider *B's* protest of *A* for violation of:

1. Either Rule 30 (A) or 30 (G), and

2. The "ordinary customs of the sea," Rule I.

All hands seem to agree that if overtaking continued up to the time of contact, *B's* protest for violation of Rule 30 (A) and Rule I should be sustained. If overtaking had ended, then *A* violated Rule 30 (G) and Rule I.

Rule 30 (A), the first written, basic rule of yacht racing reads as follows: "A yacht overtaking another shall keep out of the way of the overtaken yacht."

This sentence is terse and clear. As is the case with each of the other clauses of Rule 30, Clause (K) only excepted, it is mandatory upon the

Maine Offers 2400 Miles of Coast!

Here is one of America's greatest cruising-grounds—the picturesque, rugged Maine coast! Jig-sawed by Nature, its bays, coves, peninsulas, and points twist for 2400 miles from Kittery down to Eastport!

You can cruise in comfort off the coast of Maine—never far from shelter and supplies . . . good holding-ground almost wherever you go . . . deep, safe channels . . . clean water . . . plenty of room . . . wharves, landing-stages, and service . . . and genuine Down East hospitality at some of the world's most famous yacht-clubs!

There is *everything* for *every one* in Maine! All the surf and deep-water sports are here — hard, sandy bathing beaches; fishing and harpooning for the ocean's biggest tuna; "hand-lining" for haddock, cod, and hake; fly-fishing for mackerel and pollock.

Inland, Maine has 2500 lakes and ponds and 5000 rivers and streams restocked with millions of salmon and trout every year! Smart hotels, camps, and inns. You can ride, hike, golf, camp, canoe, play tennis. And you'll never forget Maine's food — lobsters and clams as only "State-of-Mainers" can cook them; Maine's sweet corn, potatoes, and peas!

Here is a vast and varied vacation state. The Maine Hospitality Service invites you to come this Summer. Mail the coupon now for more information.

MAINE

HAVE THE TIME OF YOUR LIFE IN MAINE!

MAINE HOSPITALITY SERVICE
751 Longfellow Square, Portland, Maine

Send me *free* the new Official Maine Vacation Pamphlet and Salt Water Fishing Booklet. (If there is any particular yachting information you want, please make a note on the margin of this coupon.)

*Name*_____

*Street*_____

*City*_____ *State*_____

INSTANT RELIEF! FROM SUNBURN

Famous Medicated Cream Cools and Soothes

● The very instant you apply cool, medicated Noxzema to painful sunburn, you get soothing relief. This famous skin cream stops the pain — seems to draw the "fire" out — gives quick, soothing relief. And Noxzema helps Nature quickly mend the blistered skin!

Don't take chances. Never go out on the water without a supply of Noxzema. It is the sunburn remedy used at Beach First-Aid Hospitals at Atlantic City, Asbury Park, Long Beach, Miami. Remember, too, Noxzema is a *greaseless* cream — will not stain clothes. Get a jar today!

NOXZEMA CREAM

Enthusiastically Received!

THE POULIOT 28′ Club Sloop Makes Good

DURING the winter a group of Great Lakes yachtsmen laid out a set of requirements of a combination one-design boat for racing and for party sailing. They demanded a boat which would embody good sailing characteristics to suit the veteran sailors of their clubs and a boat seaworthy enough for the novice to take out and weather the short-notice squalls which are peculiar to the vicinity.

In a competition of designs, Pouliot's was selected and an order for five boats placed with the Pouliot plant. The boats recently were delivered and their performance so satisfactory that an order for three more was placed at once.

Here is a boat that has been tested and approved by a group of experienced yachtsmen. It is a staunchly built craft without elaborate trimmings which can be had at an economical price and can be maintained with a minimum of work. Ideal for one-design racing, for the club fleet and for the yachtsman who puts a value on seaworthiness.

Dimensions

L.O.A. 28 feet Beam 7 ft. 6 in.
Draft 2 ft. 3 in., with Bd. down 6 feet. Ballast 750 lbs. Sail area 291 sq. ft.

Oak frames — cedar planking — Philippine mahogany trim — steel centerboard and rudder — folding seats in cockpit for ten persons — permanent backstay — combination spinnaker and balloon — cuddy forward, large enough to sleep in — hollow mast — aircraft rigging — single sheeted jib.

Designed and Built

Russell J. Pouliot, Inc.

9666 E. Jefferson Ave. Detroit, Michigan

non-right-of-way yacht to keep clear. The fact that the right-of-way yacht herself violates another clause or rule will not excuse the yacht which "must" or "shall" keep out of the way of the other. It is a clear example of the old adage "two wrongs do not make a right." Only if the right-of-way yacht violates Clause (K), making it difficult if not impossible for the other to keep clear, will the other be absolved from blame. When *B* luffed either gradually or sharply, and whether or not she had the right to luff, it was *A's* duty to "respond to the luff and protest if she thinks fit." *A* was at fault in that she did not continue her endeavor to keep clear.

The first but unwritten rule of yacht racing as well as its counterpart in the Rules of the Road at Sea is *Avoid a Collision.*

"Viking" Takes Prince of Wales Trophy

(*Continued from page 47*)

time in almost every race, only to lose out when the finish line was crossed.

So close was the final result that both *Viking* and *Achilles* had exactly the same average for the four races, 4.75, and the quarter point given to the winning boat in a race decided matters. Incidentally, the three leading yachts were never separated by more than two and a quarter points. That margin existed after the first and second races, following which it tightened up.

Weather conditions for the series varied from light and tricky winds to a fairly stiff breeze, and afforded a real test for the fleet. Great Sound is enclosed by land on three sides, and is protected by reefs on the fourth. It is spacious enough to allow of a good first leg to windward no matter what the wind direction, and furnishes a pictorial setting worthy of any yacht race.

The race committee used the so-called Swedish course exclusively, the distance each day being approximately ten miles. This course consists of a triangle (a beat, a close reach, and a broad reach), followed by a repetition of the windward leg and a run back to the finish. In a true breeze it gives the fleet a test in every point of sailing. In a shifting breeze it has the same defects as any other course.

While four races do not really afford sufficient data for the joining of definite conclusions, it appears that *Viking* is at her best in comparatively light air, although she can put up a good fight under any conditions. Throughout the entire Bermuda series *Jill* never found as much breeze as she could use. *Achilles* did not appear outstandingly good or bad in any particular kind of going. She is a good all round "Six," and takes a lot of beating. *Sea Venture*, the third Bermudian "Six," never approached the ability shown by her two sisters. As for *Swallow*, she got better and better as the series progressed, yet she seemed the least able of the three American entries. *Challenge*, designed by Luders, did not go consistently, due to various factors, but at times she gave the impression of having as much native speed as any "Six" ever put in the water.

In the Prince of Wales series the outstanding boat in turning to windward was *Jill*. Had she gone as well down hill she would have won her second leg on the cup. *Viking*, however, could show her heels to any of the other five dead to leeward or reaching. It was this ability that won for her, and it came within four feet of winning the first race for her, when she overcame a lead of at least two hundred yards on the run home and showed in front fifty yards from the line, only to have *Jill* regain the advantage when a shift of wind forced both sloops to jibe. This superiority in reaching and running enabled her to keep her lead throughout the second race, which she won easily, and in the final race it saved the series for her when it seemed sure that either *Jill* or *Achilles* was going to beat her out. Having watched cumulative point score events for some years, it occurs to me that sailing to leeward has been underrated as a factor in winning races. Last summer's women's championship illustrates this point. At any rate, *Viking* can attribute her success to that same speed down wind. She came through in one of the most exciting final races ever sailed. To begin with, *Jill* led after the third race, with 15½ points. *Viking* was second, with 15¼, while Achilles was third, with 14. This meant that one of the three boats would get a chance to sail the race unhampered while the other two fought, and *Achilles* seemed likely to be that one. And so it proved.

Jill climbed on top of *Viking* at the start, and gave her a good licking on the first windward leg, walking right past her to windward. She managed to hold her advantage all the way around the triangle, although *Viking* outran her and was close on her heels when she blocked down for the second thrash to windward. *Jill* doused her spinnaker to windward of the jib, a dangerous piece of business had *Viking* tacked immediately upon rounding. As it was, the Bermuda boat tacked before *Jill* was ready to cover, and had clear wind. The two stood on a long starboard hitch

clean across the Sound, while *Achilles* left them.

And right there *Achilles* made her bid for victory. Both *Jill* and *Viking* overstood the mark, and when they finally reached the buoy *Jill* still led her opponent, but from first and second they had dropped to fourth and fifth positions while *Achilles* was in second place. Had they finished in that order James Pearman, sailing *Achilles*, would have led with 19 points, to 18½ for *Jill*, and 17¼ for *Viking*. Nor did it seem unlikely that *Achilles* would catch *Swallow*. In that case, even though *Viking* went through both *Jill* and *Challenge*, *Achilles* would win by a point.

These might-have-beens did not come to pass, however. *Achilles*, her air broken up by *Challenge* and *Jill*, never could make up the lost distance on *Swallow*, being just out of effective blanketing range. And *Viking*, holding well down to leeward, where her wind was clear, slipped past both *Challenge* and *Jill* into third place, where she was safe by a fraction of a point. *Jill* did not succeed in passing *Challenge*, and ended up in fifth place. *Sea Venture* had blown out her good mainsail just before the start, and was forced to use an old heavy-weather sail. She never figured in the race.

Following the Prince of Wales series, Lieut.-General Sir Thomas Astley Cubitt, Governor of Bermuda, put up a cup for a series of team races between American and Bermudian teams, *Viking*, *Achilles*, and *Sea Venture* opposing *Jill*, *Swallow* and *Challenge*. Two races were sailed, cumulative points again deciding things. In the first, meeting with airs of a trickiness that not even Long Island Sound has ever exceeded, the Bermudians came through 14¼ to 8, which put on the Americans the necessity of gaining first, second and third to win in the final event.

That race was sailed in a real breeze, and the Americans just fell short, taking first, second and fifth. It was a most interesting race, with 35 seconds covering the first four boats. The final score was 22¼ to 20¼, and was a fitting close to a series marked by keen competition and sportsmanship of a high order, and bore out Bermuda's claim to being the winter yachting capital of the Western Atlantic.

American Stars Clean Up in Bermuda

(*Continued from page 46*)

ing their energy in order to make a desperate effort to wrest the spring title from him — and they almost succeeded. *Argo*, by virtue of consistent sailing, was runner-up in this open event, and Sam Smith, spoiling his two second places by falling down to a seventh in the second race, ended in a tie for third with *Shucks*. The only other notable incident was the rather remarkable comeback staged by Walter Pilcer. Representing Greenwood Lake, and never having sailed on salt water before, he suddenly got the hang of his boat, after finishing a poor last in the early races, and covered himself with glory with a fourth and a fifth place in the closing races of this open event.

No one could ask for a closer or more exciting series than the Spring Championship. From start to finish it was a three-cornered battle between *Ace*, *Pathfinder* and *Argo*, with the result in doubt until the last gun, each boat winning one race. *Ace* won the first, Iselin taking a beautiful start and increasing his lead steadily to win by nearly four minutes, while Smith and Whittelsey had a private duel, the former nosing out the *Argo* at the finish. This race was sailed over a windward and leeward course, and the one-point lead that Iselin gained by winning this first race is what eventually gave him the series.

The second race went to *Argo*. While *Ace* and *Pathfinder* were fighting it out, tack for tack, Whittelsey, deciding that he was no match for these two boatloads of talent at that game, split tacks. Getting a slight lift under the shore, he rounded the weather mark about a minute ahead. The reach that followed found the yachts in approximately the same position, *Ace* being second. On the last run home, in a wind which had moderated to about eight knots, both *Ace* and *Pathfinder* began rapidly to close up the gap. It looked as if *Ace* was going to win again, but the South Bay skipper just managed to shove *Argo* across the line with eight seconds to spare. This put *Argo* in second place in the series, one point ahead of *Pathfinder* and one point behind *Ace*. Iselin still had his single point lead.

The final race was won by *Pathfinder*. Smith and Robinson took the lead at the start and kept increasing it. This last race was sailed in a stiff 12-knot breeze and over another triangular course. *Ace* had a very poor start, suffered from everyone's backwind, and rounded the first windward mark astern of both *Argo* and Paul Smart's *Nutmeg*. At this point it was Smith's series, had the yachts remained in this position, and for the first time the crown would have gone to a fresh water sailor. Nor was it Smith's fault that the race did not end this way. He kept Iselin covered throughout. *Ace* finally caught and

ALOHA

Ratsey & Lapthorn, Inc.

Sailmakers Established 1790

Telephone: City Island 8-1012

City Island, New York City

THE *YANKEE* USES JATON *for* WATERPROOF COVERINGS

When the *Yankee* fitted out for racing in England this summer JATON was used extensively for waterproof coverings.

Most everyone has a canvas problem, and sailmakers tell us JATON is the answer.

JATON is a real white, permanently treated, canvas that is ALWAYS:

- Watertight — it will not leak.
- Washable without injury to the finish.
- Soft and pliable — it will not harden.
- White — it does not turn yellow in sunlight.
- Clean — it will not become sticky.

Available in white, khaki, and green.

Cousens & Pratt after a year's experience write:

"Pleasantly surprised to find a canvas that could be washed, was absolutely waterproof, and still stayed white."

JATON is ideal for SAIL COVERS, AWNINGS (especially on Diesel Yachts), COCKPIT COVERS, SPRAY HOODS, CURTAINS, WINTER COVERS, wherever canvas is used. Whatever your canvas problem, write us or ask your sailmaker about JATON.

THE GILL CORPORATION

238 MAIN STREET CAMBRIDGE, MASS.

KORŌDLESS

LONG ISLAND SOUND INTERCLUB UNDER NEW RIG

Hazard Korōdless Wire Rope was used in the re-rigging of the Interclubs by Luders.

Specify Korōdless rigging because: it is genuine 18-8 Stainless Steel, never rusts nor corrodes, and always retains its original brightness. Saves weight aloft, as it is stronger, size for size than other types of rigging. Being pre-formed, it is easier to handle and gives longer fatigue life over sheaves.

Write for a copy of our new Korōdless Marine Rope Handbook.

HAZARD WIRE ROPE CO.
MARINE DEPT.
230 Park Ave. New York

THE GREATEST NAME IN MOTOR BOATING
GAR WOOD

DELUXE UTILITY

20-ft. overall, open cockpit type, seats nine. V-type hull of Philippine mahogany natural finish. Genuine leather upholstery. Shatterproof glass windshield. Complete instrument panel. All hardware chromium plated. Speeds up to 30 miles. Chrysler 6 cyl. 73 h. p. engine. *Price at factory* $1195

16-ft. RUNABOUT

A faithful reproduction of Gar Wood larger models to the smallest detail. Seats 5 adults. Forward and aft cockpits leather upholstered. A Chrysler 6 cyl. 73 h. p. engine gives this seaworthy little gem a thrilling speed of 34 miles. *Price at factory* $995

18-ft. SPECIAL RUNABOUT

Beautiful appointments, rich leather upholstery, chromium plated deck fittings and metal trim. V-type hull natural mahogany hand finished. Double cockpit forward, seats 6. Model 18-35—speed 36 miles, Chrysler 6 cyl. 92 h. p. engine, price at factory $1500. Model 18-30 speed 32 miles. Chrysler 6 cyl. 73 h. p. engine, *price at factory* $1300

Address all requests to
GAR WOOD, INC.
505 River Road, Marysville, Michigan

passed *Nutmeg*, but could not break through *Argo's* lee. For some unaccountable reason, young Tom Whittelsey split tacks and let *Ace* go. That was exactly what Iselin was looking for and, with a free wind, he soon got the *Ace* going and moved up into second place. It was all over, for that second place gave Iselin the single point which meant the Spring Championship. Thus ended the serious racing of the week.

The remaining event, the International Team Race, turned out to be something of a circus. Realizing that the competition would not be very close, the committee decided to sail this race over a special course in Hamilton Harbor and give the populace a break. Sailing in among the wharfs and coral reefs, the American team defeated the Bermudians by the unprecedented score of 26 to 4. Local knowledge should have benefited the 'Mudians, and seemed to for the first round, in which *Ace* actually was last. But once the visitors discovered where to go, they went places and, led by *Ace*, finished one, two, three, four. On this last round, the Bermuda quartet was lost by the wayside. *Stella Maris*, sailed by Peggy Best, was the only member of the team to finish. *Amco*, the best of the Bermudians, sailed by G. B. H. Snowdon, who has been the leading spirit in promoting this fleet, hit a mark and withdrew. *Pearl III*, not to be outdone by the team captain, followed suit and also withdrew. This left only the *Stella Maris* and the mighty Eugene Kelly, most international of International Star skippers, the American-born Irishman who once represented France, but now sails for Bermuda, and belongs to a yacht club in England. Gene could have finished, but when he was a short distance from the line he took a look at the white-roofed houses along the shore (the roofs are used to collect the water supply), twirled his sumptuous mustachio, and remarked to his crew, "My lad, this is the one place in the world where there is no water and that's why I moved here. Who the heck wants to drink water? Let's call it a day." And with very much the same idea in mind, the other Star sailors gathered that evening at Belmont Manor for the final banquet and presentation of prizes.

It may be two years before Bermuda again welcomes the Star skippers from the States, for Nassau has the first claim on this event in 1936. But when the Spring Championship is again sailed on Great Sound, one thing is certain — that there will be a different story to tell. Bermuda has good skippers and many of them, and now that the class has taken root, it will spread. Next time, doubtless, the challengers will find a far different brand of competition.

1935 STAR CLASS SPRING CHAMPIONSHIP

Bermuda Challenge Trophy

Yacht	*Skipper*	*Fleet*	*Placed*			*Pts.*
Ace	Adrian Iselin	Western L. I. Sound	1	2	2	22
Pathfinder	Sampson Smith	Otsego Lake	2	3	1	21
Argo	T. D. Whittelsey	Great South Bay	3	1	3	20
Amco	B. G. H. Snowdon	Bermuda	5	5	4	13
Shucks	F. H. VanWinkle	Western L. I. Sound	4	4	8	11
Nutmeg	Paul Smart	Central L. I. Sound	6	6	6	9
Pearl III	Howard Trott	Bermuda	7	7	7	6
Amp	W. G. Pilcer	Greenwood Lake	8	8	5	6

ROYAL BERMUDA YACHT CLUB TROPHY

Open Series

Yacht	*Skipper*	*Yacht Club*	*Placed*			*Pts.*
Ace	Adrian Iselin	Port Washington	1	1	1	30
Argo	T. D. Whittelsey	Babylon	3	2	3	25
Pathfinder	Sampson Smith	Cooperstown	2	7	2	22
Shucks	F. H. VanWinkle	Port Washington	4	3	4	22
Amp	W. G. Pilcer	Awosting	9	4	5	15
Amco	B. G. H. Snowdon	Royal Bermuda	6	5	..	11
Stella Maris	Peggy Best	Royal Bermuda	7	6	W	9
Fouah Leih	Eugene Kelly	Royal Thames	..	8	6	8
Nutmeg	Paul Smart	Noroton	5	W	W	6
Pearl III	Howard Trott	Royal Bermuda	8	9	..	5

INTERNATIONAL TEAM RACE

U. S. A. vs. Bermuda

Ace	Adrian Iselin	U. S. A.	8	..
Pathfinder	Sampson Smith	U. S. A.	7	..
Amp	W. G. Pilcer	U. S. A.	6	..
Argo	T. D. Whittelsey	U. S. A.	5	..
Stella Maris	Peggy Best	Bermuda	..	4
Fouah Leih	Eugene Kelly	Bermuda	..	0
Pearl III	Howard Trott	Bermuda	..	0
Amco	B. G. H. Snowdon	Bermuda	..	0
			—	—
		Total U. S. A.	26	Bermuda 4

Laying Canvas

USE FERDICO CANVAS CEMENT

A HEAVY coat of Ferdico Canvas Cement used under canvas that is drawn tightly, smoothed from the center, and tacked down along the edges, will give you a tough waterproof covering that will not check (as canvas laid in linseed oil and white lead will). It is more durable and more economical than varnish, paint or other fillers.

Ferdico Canvas Cement can also be used for attaching cork, felt, rubber, leather, and linoleum to iron, steel and wood.

For DECK SEAMS use Jeffery's No. 1 Marine Yacht Glue

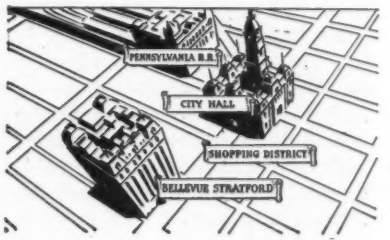
For HULL SEAMS use Ferdico SEAMSEAL

For DOUBLE PLANKING AND BATTEN SEAMS use Ferdico Aviation Liquid Marine Glue

For CANOES use Special Marine Canoe Glue

Write for booklet, "How to Repair Leaks in Your Boat"

L.W. Ferdinand & Co.
599 Albany Street Boston, Mass.



In the heart of Philadelphia . . . socially, commercially, geographically. Here a modern hotel, world famous for its hospitality, its cuisine and its generous provision for the comfort and the convenience of its guests.

Rates as low as $3.50

Claude H. Bennett, General Mgr.

Bellevue Stratford

The ketch "Hamrah," 54 feet over all, is owned by Robert R. Ames of Wayland, Mass.

All Set for Norway!

(Continued from page 55)

While all the measurement certificates have not been received, it is certain that the ketch *Vamarie*, the largest of the fleet will be scratch yacht. She will have to give *Mistress* between eleven and twelve hours for the course, and the little *Stormy Weather* some 43 hours, or thereabouts. As the two foreign entries have not been measured, their allowance is as yet an unknown quantity, but in both cases it should be about that of the *Stormy*, or perhaps a bit more.

To pick the winner in this fleet is a real job, as anyone knows who has tried to dope out in advance the winner of any ocean race. Alf Loomis has told you all about the various courses in the last two issues of YACHTING. Much depends on the choice of course, and the temptation to cut corners and go as close to Cape Race as possible to save distance will be strong, especially after *Dorade's* experience in the race of 1931 to England when she took this course and won. But this year the ice coming down from the Arctic is unusually heavy and extends far south, to below 42 degrees N. In the face of this hazard the Gulf Stream course would seem the wisest, and certainly the safest. But will all the skippers take it? None is telling what he will do, and as the fleet is sure to get separated quickly, luck will play a big part in the passage. From twenty to twenty-one days will be a good crossing. We doubt if any boat makes it in less time, but, again, there is no telling.

We pick *Vamarie* to be the first to finish, as she has done in every race in which she has started. Makaroff has a good crew in George Pynchon, Paul Abbott, Barclay Douglass, Martin Scott and Sherman Hoyt, if the latter is well enough to sail. *Stormy Weather* will be driven every foot of the way by "Rod" Stephens, who will be in command, and with "Ducky" Endt, "Plugity" Foster, Phil LeBoutillier, Jr., "Chick" Larkin and the others to carry on at all times, day and night. We predict that the yacht that beats the *Stormy* will win the race. George Roosevelt and his experienced crew will keep *Mistress* trotting. She should be close behind *Vamarie* on elapsed time, but she will have trouble saving her time on the smaller boats, as the rule is none too kind to her.

Of the foreign boats too little is known to hazard a guess, and the same applies to the other American entries. They may do well. But experience is of great advantage in a race of this kind and the three yachts above mentioned have a lot of this on their decks.

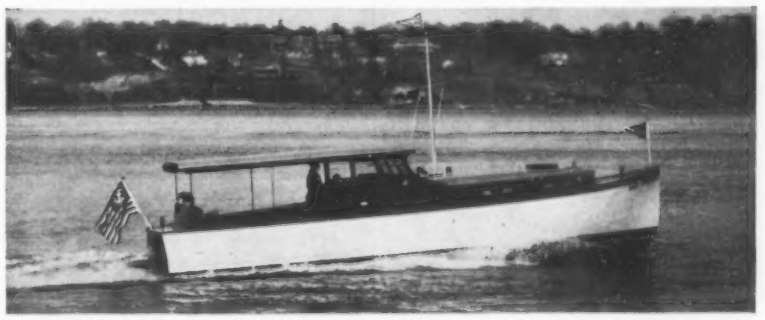
Will tell you more about it after the finish, when the story comes through from Chick Larkin. But, in the meantime, keep your eyes on *Stormy*.

Let PIPER *play the theme song to every glamorous occasion*

PIPER-HEIDSIECK
ESTAB. IN 1785
Champagne

SOLE U. S. IMPORTERS: BROWNE VINTNERS CO., INC., NEW YORK—SAN FRANCISCO

THE NEW CONSOLIDATED
PLAY BOAT



Length 39′ Beam 11′

FEATURES

(1) Double planked hull, copper fastened.
(2) Single or twin cabins — accommodating two, four or six as may be desired.
(3) Five alternate arrangement plans — for cruising, fishing or day sailing.
(4) One or two motors — speeds up to 22 miles per hour.
(5) A very complete equipment list.
(6) Low priced.

BUILDING SCHEDULE PERMITS EARLY SUMMER DELIVERIES ON ORDERS RECEIVED PROMPTLY

Write for illustrated folder — call and inspect the many boats under construction, or phone Ludlow 7-1400

Our many customers and friends will be interested in our new Speedway engine price list — Write for it. Speedways are now offered at a popular price.

CONSOLIDATED SHIPBUILDING CORPORATION
Morris Heights, New York City

Representatives: Pierce & Kilburn, Inc., New Bedford, Mass., J. Frank Knorr, Inc., 528 N. W. 7th Ave., Miami, Fla., Mahon & Gall, Inc., Pratt & Gay Sts., Baltimore, Md.

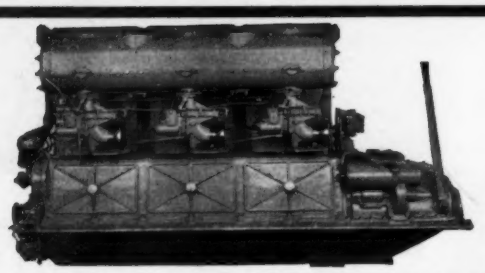
This tender can

"TAKE IT"

THE Old Town Dinghy will stand a lot of punishment. Strong cedar frame and planking are covered with tough seamless canvas. Sun and air won't shrink it. Water won't swell it. It never leaks . . . never needs caulking.

An Old Town Dink stows well and tows well. Sizes for use on all craft. Each is braced to carry a motor. Sailing dinghies. Free catalog shows models and prices. Also canoes, rowboats and outboards; including big seaworthy boats for family use. Write today! Old Town Canoe Co., 166 Main St., Old Town, Maine.

"Old Town Boats"



WE show here the Murray & Tregurtha Model OCX-6-cylinder, 7¼" x 8" fuel-oil engine of which two have recently been installed on the U.S.C.G. DIX with Morse 2:1 reduction gears; and one on the U.S. Lightship BRENTON with Westinghouse 4.2:1 reduction gear. It is conservatively rated 145 h.p. at 800 r.p.m. and 175 h.p. at 1100 r.p.m. and can be furnished either direct drive or with reduction gear. Murray & Tregurtha fuel-oil engines use the Shore Fuel-Oil Equipment.

Write for complete information

MURRAY & TREGURTHA, INC.

NORTH QUINCY, MASS.

SMALL SAILBOATS

SKIPPER, JR.

12½-ft. boat, unusually stable, safe, sturdy boat; built of fine materials. Large enough to comfortably seat two grown-ups or three children. Deck inlaid light and dark wood finished natural. Top sides French gray with vermillion bootline. Other color optional. All brass screw fastened and brass trimmed. High grade sails. A boat for a man who enjoys a quality boat. Circulars on request. Price $225 at plant.

We make a quality Snipe — built to Rudder specifications. Length 15½', Beam 5', Draft 8". Brass deck fittings and brass screw fastened. Circulars. Price $260 at plant (So. Coventry, Conn.).

THE WARNER MURPHY CO.

Yacht Brokers and Boat Builders

HARTFORD TIMES BUILDING

PROSPECT STREET

HARTFORD, CONNECTICUT

"USE KUHLS ELASTIC MARINE PRODUCTS—I'm tired of this expense every year."
2 KUHLS'
for 46 years
KUHLS
Elastic Seam Compositions

H. B. FRED. KUHLS, 65th St. and 3rd Ave., BROOKLYN, N. Y.

A Long, Tough Grind

(Continued from page 49)

Dr. Cecil H. Bagley, of Baltimore, in *Wilmer III*, a "225." None of the big Class F boats finished. Indeed, the percentage of boats finishing was low due to the rough water in the upper reaches of the Hudson. Fifteen Class A boats started and two finished, while three Class B boats survived out of fourteen starters. In Class C, twenty-nine left Albany and five arrived at New York. Two of the big Class F boats started and both failed to finish, while five of the eight outboard runabouts came through. Seven inboard hydroplanes started and only two crossed the finish line.

The boats were started on their handicaps, the little Class A boats being sent away at 7:00:00, Class B at 7:09:35, Class C at 7:36:30, Class F at 7:49:26. The 225-cubic-inch hydroplanes were started at 8:30, and the Class I inboard runabouts at 9:00. These two classes, with the outboard runabouts (started at 7:15), were not eligible for the principal prizes.

The Haynes-Griffin Perpetual Trophy for the first boat to finish went to Fred Jacoby, Jr., who has competed in six previous races and finished in all but one, that of 1929 when his engine broke down a mile from the finish. He also won $200 for first place and $50 for first in Class C-II. Crooks won the Jules Heilner Trophy and the N.O.A. gold wrist watch for the first amateur to finish, the Eastern Intercollegiate Outboard Trophy for the first school or college student, and prizes for third place in the race and first in Class B. Arthur Baldwin captured the W. E. Willis Trophy for runabouts and the Woodcliffe B. C. Cup, while Edison Hedges took the New York Sun Trophy for the 225 Class.

Cash prizes (for the professionals) or trophies of equal value (for the amateurs) were awarded to the first ten boats and to the winner in each of Classes A, B, C, and F. The race was run under the auspices of the Middle Atlantic Outboard Association.

The summary follows:

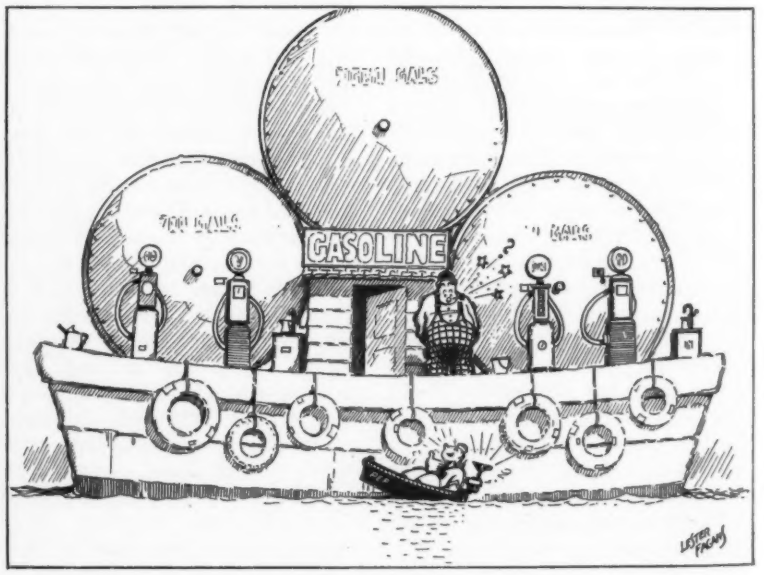
EIGHTH ANNUAL ALBANY-NEW YORK MARATHON

Distance — 129¾ Miles

OUTBOARD HYDROPLANES

Starting Times — Class A, 7:00:00, Class B, 7:09:35, Class C, 7:36:30, Class F, 7:49:26, scratch.

Place	Actual Finish	Driver and Home	Class	Hour Finishing	Actual Time Needed	Speed M.P.H.
1.	(1)	Fred Jacoby Jr., North Bergen, N. J.	C-II	11:04:57	3:28:27	37.3
2.	(2)	Ted Roberts, New York City	A-II	11:24:12	4:24:12	29.4
3.	(6)	Sam Crooks, Rumson, N. J.	B-I	11:45:48	4:36:13	28.1
4.	(8)	M. Eldredge, E. Weymouth, Mass.	C-II	12:11:05	4:34:35	28.3
5.	(10)	Leroy Ransden, Bridgewater, Mass.	C-II	12:41:12	5:04:42	25.5
6.	(11)	Clayton Bishop, Onset, Mass.	B-II	12:46:13	5:36:38	23.1
7.	(12)	Jack Scarbrough, Hanover, N. H.	A-I	12:53:50	5:53:50	22.0
8.	(14)	A. W. Hale, Albany, N. Y.	B-I	12:57:50	5:48:15	22.3
9.	(16)	Jerry Almo, New York City	C-I	1:36:05	6:05:35	21.2
10.	(17)	Joseph White, Poughkeepsie, N. Y.	C-II	1:55:00	6:18:30	20.5
		OUTBOARD RUNABOUTS Start 7:15				
1.	(3)	Arthur Baldwin, Freeport, L. I.	E-I	11:30:29	4:15:29	30.4
2.	(5)	Wesley Carman, Freeport, L. I.	E-I	11:43:26	4:28:26	29.0
3.	(7)	Henry Slocum, Freeport, L. I.	C-I	12:06:37	4:51:37	26.6
4.	(9)	Albert Azalia, Peekskill, N. Y.	F-I	12:18:40	5:03:40	25.6
5.	(13)	C. H. Definbaugh, Dover, Del.	F-I	12:54:01	5:39:01	22.9
		225-CUBIC-INCH HYDROPLANES Start 8:30				
1.	(4)	Edison Hedges, Atlantic City, N. J.		11:42:22	3:12:22	40.4
2.	(15)	Dr. Cecil H. Bagley, Baltimore, Md.		1:05:008	4:35:08	28.2



"Fill 'er up, big boy!"

Of Interest to the Skipper

Sport afloat! This gunner practices on flying targets tossed out by a Remington automatic hand trap

Trap Shooting Afloat

THE introduction of the Remington Automatic Hand Trap allows the shooting enthusiast to get in plenty of practice on flying targets from the deck of his boat. The new trap is so well balanced that it may be cocked with little effort, and designed so that fast, rapidly spinning targets may be thrown from almost any position and from any angle. The gunner may shoot from a speeding motor boat or from the deck of a sail boat at anchor or under way. The target thrower may stand on a point ashore and the marksman be in a moving speed boat, or *vice versa*. The clay targets may be thrown at any angle to give needed practice on any desired type of shot, "pass" or "jump" shooting or high winging targets. With two hand traps, each man may shoot in turn and an interesting competition be staged.

Endless variations may be worked out with the combination of trap and gun. The necessary space is found almost anywhere afloat. On large craft, with plenty of deck room, the trap offers practice in Skeet shooting at any angle. The wild fowl gunner may keep himself up to concert pitch throughout the summer. All he needs is a hand trap or two, a carton of Blue Rocks, his gun and ammunition. For him the clay pigeon season is open all summer.

\+ + +

Universal Wins in 225 Class

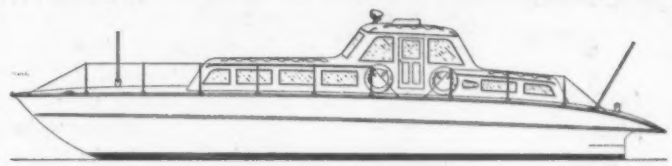
EDISON HEDGES, who has been racing motor boats for some time, entered his *Universal Eagle* in the 225 Class in the Albany-New York Race last month. Eight of these boats were entered, seven started and two finished, the winner being Mr. Hedges' *Universal Eagle*, an old hull with a new Universal 125-cubic-inch engine. She made the course, 129¾ miles, in 3:12:22, an average speed of 40.469 m.p.h.

\+ + +

"Telling the World"

DURING this year's Albany-New York outboard race, the crowds of spectators at Poughkeepsie and at the finish line were kept informed as to the progress of the racers during the contest. An Esso plane followed the boats down river and an observer, one of the staff of the Colonial Beacon Oil Company, gave a detailed description by short wave radio. This was picked up by members of the Essomarine organization and passed on to the waiting crowds through a public address system both at the halfway point and at New York. At the conclusion of the race the winners and others prominent in the sport made brief addresses.

SEA SLED INBOARD RUNABOUTS



*Design for 45' **SEA SLED** Commuter*

Model 16—with Gray Phantom 4-55
15' 10½" overall length; 4' 5½" beam $695

Model 18—with Gray Phantom 4-55
19' 9½" overall length; 4' 11½" beam $895

Model 22—with Gray Phantom Eight
22' 5" overall length; 5' 10½" beam $2095

Model 26—with 2 Gray Phantom Light-Sixes
25' 10½" overall length; 6' 8" beam $2995

HICKMAN SEA SLED COMPANY, Inc.
441 LEXINGTON AVENUE, NEW YORK

SEA SLED
Trade Mark Reg. U. S. Pat. Off

LICENSED UNDER HICKMAN PATENTS

Their* SAFETY *is Your Responsibility

Our new booklet "The Boat That Won't Burn" — will explain to you why over 7000 yacht owners have installed Lux fire equipment and also why the *only automatic fire protection approved by the Underwriters' Laboratories for boats is*

LUX-O-MATIC
Fire Protection

Write
Walter Kidde & Company
Bloomfield, New Jersey

RED HAND
YACHT *and* BOAT PAINTS

INSIST on Red Hand Hull White and deck paints for your yacht and avoid the expense of mid-season painting. Correctly formulated, they possess sparkling beauty plus the durability which outlives the whole season. Red Hand anti-fouling paints will ward off teredo worms and barnacles from June until October. They give a hard, slippery bottom.

RED HAND COMPOSITIONS Co. Inc
1 BROADWAY, NEW YORK Phone DIgby 4-3298-9

NEW MYSTERY BOAT FOR 1935

SAIL AREA

•

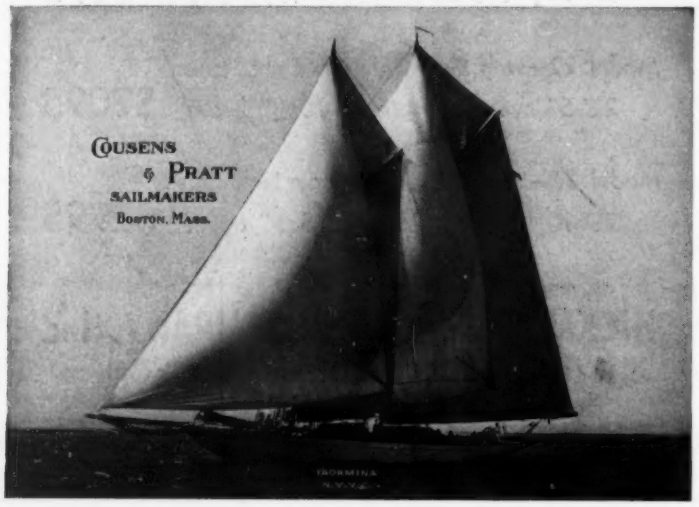
For Further Information Write: The New Mystery Boat Box G Wareham, Mass.

152 SQ. FT.

•

Also Builders of the Ace of Hearts or Snipper Class. A One Design Class

Care of CAPE COD SHIP BUILDING CORP.
ALL PRICES F.O.B. WAREHAM, MASS.



LEARNING TO RACE

By **H. A. CALAHAN**

HERE is a book which will interest every landlubber who ever had a hankerin' to sail, every sailor who has grasped his own tiller, every yachtsman who has listened for the starting gun.

More than any writer on the subject, this author has the knack of imparting his knowledge through printed pages — and Skipper Calahan has 35 years of practical experience behind him.

Diagrams and photographs assist in making every problem as clear as crystal.

Price $3.50

BOOK DEPARTMENT

YACHTING

205 EAST 42ND STREET NEW YORK CITY

"Nanuk-Mi-Kin-Inni" was built for Dr. L. M. Waugh by Dawn Cruisers, Inc., and is powered with a Model UAD 40 hp. Lycoming. Dr. Waugh plans to explore parts of the Alaskan coast this summer

Champion Offers Prizes to Outboard Champions

ANNOUNCEMENT has been made by the Champion Spark Plug Company that, instead of the trophies formerly awarded to the National Outboard Association high point winners who have used Champion spark plugs, each 1935 outboard champion will receive a new, imported, waterproof, shockproof and dustproof wrist watch. The case of the watch is of stainless steel and is designed so that immersion in water, violent temperature changes and mechanical shock have no effect on its excellent timekeeping qualities. The dial is white enamel and hands and figures are visible in the dark.

As in previous years, the awards will be made to high point winners who have used Champion spark plugs in all of their races during the season. Standings will be determined by the N.O.A. scoring system, and drivers in Classes A, B, C, and F, in Eastern, Central, Western and Southern Divisions will be eligible.

\+ + +

Race Winner Used Texaco

THE 1935 Albany-New York Outboard Marathon was run under the worst river conditions in the history of this grueling race. Fred Jacoby, Jr., winner of the Haynes-Griffin Trophy, uses Texaco in his motor. In fact, six of the ten drivers of outboard hydroplanes that finished used the products of the Texas Company.

\+ + +

A Log Book for the Asking

THE Richardson Boat Co., Inc., of North Tonawanda, N. Y., builders of the Richardson Little Giants, Juniors and Cruisabouts, offers a log book to cruising yachtsmen. The book is a handy size and has in it sixteen pages of valuable information. There are various hints on boat handling, a storm signal chart, a blank for a deviation table, and, of course, tabulated pages for the record of the boat's activities. To obtain one of these books, send your name and address, size and type of your boat, her registration number and your yacht club affiliations to the Richardson Boat Co., Inc., 364 Sweeney St., North Tonawanda, N. Y., with a three-cent stamp.

\+ + +

Korodless Wire Rope

THIS stainless steel wire rope, manufactured by the Hazard Wire Rope Company, New York, has been growing in favor with yachtsmen ever since it was first put on the market. It is rustless and its life is much longer than that of the ordinary wire rope. As its tensile strength is high, a smaller diameter may be used, thus saving both weight aloft — where weight is most disadvantageous — as well as windage. Another advantage is that when it is spliced the wire remains unchanged. With galvanized rope, the galvanizing is apt to chip off during the splicing process. Splicing is easy, as the wire is "preformed" and each strand holds its shape even without a whipping on the end, not separating into a bundle of separate wires as does the common sort of wire rope. It may also be used with socketed fittings instead of splices.

As the wire is handled through dealers all over the country, the manufacturers naturally cannot keep track of every purchase. They are anxious to trace the users of Hazard Korodless and have offered to send a Schick Injector razor set to every owner who has Hazard Korodless wire rope in use on his boat. To get one of these razor sets, just turn to page 105 of the April number of YACHTING, fill out the coupon and send it to the Hazard Wire Rope Company, 230 Park Avenue, New York.

Busy Days at Solomons

THE yard of M. M. Davis & Son, Solomons, Md., is busy these days completing three yachts for delivery. These are the new *Cheerio*, a 50-foot motor ketch designed for George H. Townsend of New York by Charles D. Mower; a 30-foot sloop for C. W. Moore of New York, and *Lady Patty*, a 40-foot double-ended auxiliary ketch for E. E. Bishop of Bradentown, Florida. Both of these are from designs by Philip L. Rhodes, associated with Cox & Stevens, Inc.

The yard is also fitting out the following yachts: *Mañana*, Roger Young, New York; *Privateer*, T. F. Schneider, Washington, D. C.; *Borealis*, Earl Holley, Detroit, Mich.; *Monsoon*, Col. Paul Henderson, Washington, D. C.; *Sunny* and *Dauntless*, George A. Whiting, Baltimore, Md.; *Lone Star*, Robert W. Williams, Baltimore, Md.; *Ellida*, Dr. S. B. Westlake, St. Louis; and *Annette* (ex-*Quicksilver*), J. Goodwin Hall, New York.

On their way north from cruising in southern waters, *Aweigh*, *Lord Jim*, *Cachalot*, *Duchess*, *Seriola* and *Venturer* are scheduled to return to Solomons for their usual spring overhauling.

\+ + +

Comets in Production

THE Comet, the 16-foot unballasted centerboard sloop designed by C. Lowndes Johnson, is growing rapidly in popularity. Many are being built in different parts of the country and the coming season should see a marked increase in the class. They are fast and able and make a splendid one-design class.

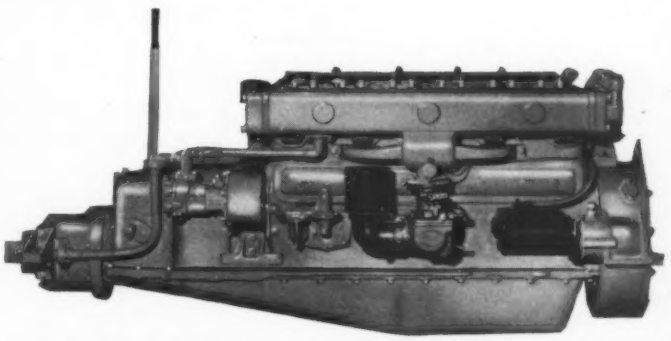
Early this year the Skaneateles Boat and Canoe Company started eleven of these little racers and, at this writing, there are but three of them left on hand. Ten more have been put into production and will be pushed to completion. Construction is high grade, the boat being entirely screw-fastened and a workmanlike job throughout. The fittings have all been especially designed for these boats, which makes them far more satisfactory than the usual stock variety.

\+ + +

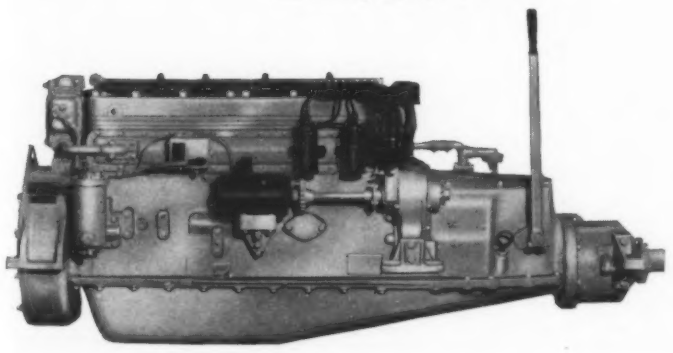
Buda Gasoline Engines

THE new Startix system replaces the older type of starting mechanism in the newest engines manufactured by the Buda Company, Inc., of Harvey, Illinois. Turning on the ignition switch starts the engine. If it fails to start on the first attempt, Startix repeats until the engine goes. Startix also restarts the engine should it stall. In the illustration, the Startix may be seen on the port side of the engine, slightly below the top in the middle of its length.

The new engines are also fitted with the latest type of Stromberg carburetor. It has an automatic drain system which disposes of any gasoline which may accumulate in the manifold during starting. A completely sealed float chamber keeps fuel from slopping out of the carburetor in a seaway. Fuel economy is maintained both at full speed and when idling or running slow.



The latest Buda gasoline engines are equipped with the new Startix system and the most modern type of Stromberg carburetor

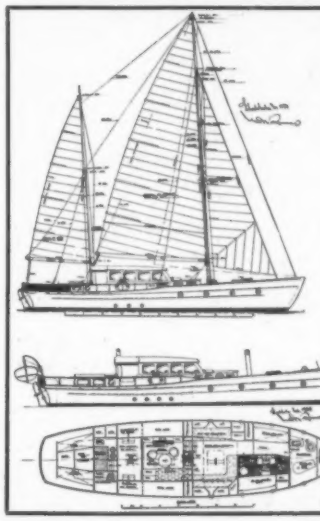


CORRECT YACHTING UNIFORMS SINCE 1856

Complete Outfits for Owner, Officers and Crew— Furnished instantly

Send for Catalog "Y" or representative

S. APPEL & CO.
14-18 FULTON ST. NEW YORK CITY
323 N.E. 1st ST. MIAMI FLA.



REIMERS-BUILT BOATS
ARE
SUPERIOR BUILT BOATS

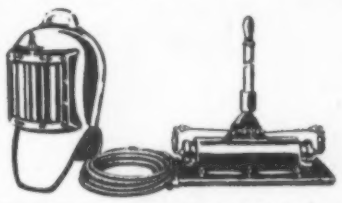
BEAUTY
STRENGTH
BALANCE
ECONOMY
COMFORT

KNUD H. REIMERS
Banergatan 27, Stockholm
Cables: "YACHTREIMS"

54 Foot Diesel Motorsailer
$16,000 cif New York, Duty Paid

NEW WILLIS DIVING OUTFIT

Have one of these diving helmets on your boat all the time, it will help you do a lot of jobs — it is simple and safe to use — when any emergencies arise such as removing rope from propeller, or broken rudder, fixing a leak plus many other uses.



DIVING HELMET same as above with light duty pump and hose..... $25

DOUBLE ACTING PUMP as illustrated above, when sold separately..... $20

DIVING HELMET complete with 25 ft. non-kinkable hose, and double acting pump, as illustrated $38

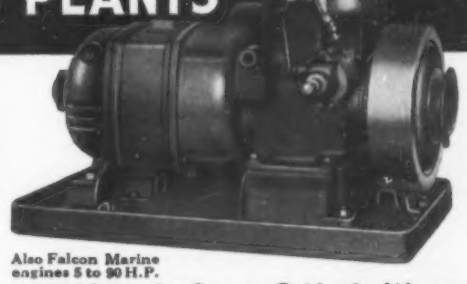
Give yourself and your friends a new thrill. Explore the bottom of rivers, lakes, etc. See the beautiful flowers, corals, etc. Send for literature.

Send 25c to cover postage and handling for our new 1935 catalog. 256 pages, Boat Supplies, 1500 illustrations, 10,000 items. Send for it today.

The E. J. WILLIS CO., 85 CHAMBERS ST., N.Y.C.

U. S. "FLOATING" ELECTRIC PLANTS

RUBBER MOUNTED



Rubber mounting with special "floating" base eliminates vibration. Designed expressly for cruisers and yachts. Extremely compact and light weight. Complete range of sizes from 800 watts and up — AC or DC. Also 300 and 500 watt air-cooled units, 12 or 32 volts.

Write for literature

Also Falcon Marine engines 5 to 90 H.P.

U. S. MOTORS CORP., 435 Nebraska Street, Oshkosh, Wisconsin

U. S. ELECTRIC PLANTS *and* ENGINES

YACHTING ADVERTISERS

A

ALDEN, JOHN G. 17–119
ALMEN, N. ERIK 20
AMERICAN BRASS CO. 6
AMERICAN CAR & FOUNDRY CO. 12–95
APPEL & CO., S. 129
ATLANTIC MUTUAL INSURANCE CO. 94

B

BAILEY, HAROLD H. 24
BAKELITE CORP. 92
BARBASOL CO. 110
BAUSCH & LOMB OPTICAL CO. 103
BELKNAP & PAINE, INC. 18
BELLEVUE STRATFORD 124
BON AMI 98
BOYLE CO., A. S. 101
BRENNIG'S OWN CIGARETTES 103
BROWNE VINTNERS CO., INC. 125
BRUNS, KIMBALL & CO. 24–97
BUDA COMPANY 4
BURGESS & DONALDSON 19

C

CAMELS ..... 4th Cover
CAMPS 25
CAPE COD SHIPBLDG. CORP. 128
CARLISLE & FINCH CO., THE 101
CASEY BOAT BUILDING CO., INC. 131
CHALFONTE-HADDON HALL 114
CHAMPION SPARK PLUG 87
CHRIS-CRAFT CORP. 90–91
CHRYSLER MOTORS 9
COLUMBIAN BRONZE CORP. 118
CONSOLIDATED SHIPBLDG. CORP. 125
COOPER-BESSEMER CORP. 103
COUSENS & PRATT 128
COX & STEVENS, INC. 14
CUMMINS ENGINE CO. 109

D

DE GRAUW, AYMAR & CO. 101
DODGE BOAT & PLANE CORP., H. E. 1
DONALDSON & CO., INC. 15
DUESENBERG 26
DU PONT DE NEMOURS CO., E. I. 96

E

EASTMAN KODAK CO. 115
EDISON STORAGE BATTERY 111
ELCO WORKS 29
ELDER, GEORGE 23
ELDRIDGE, INC., WM. M. 20
ELECTRIC STORAGE BATTERY CO. 106
ELGIN NATIONAL WATCH CO. 117
ELTO 89
EVINRUDE 89

F

FAIRBANKS-MORSE & CO. 10
FENGER, FREDERIC A. 22
FERDINAND & CO., L. W. 124
FURNANS YACHT AGENCY, INC. 24

G

GARDNER & CO., WM. 19
GARNEAU CO., INC., JOS. 115
GIELOW, INC., HENRY J. 16
GILL CORP., THE 123
GORDON DRY GIN CO., LTD. 105
GREBE & CO., INC., H. C. 23
GULF REFINING CO. 132

H

HALL-SCOTT MOTOR CAR CO. 12
HAZARD WIRE ROPE CO. 124
HEINZ CO., H. J. 114
HERRESHOFF MFG. CO. 121
HICKMAN SEA SLED CO., INC. 127
HYDE WINDLASS CO. 101

I

INTERNATIONAL NICKEL CO., INC. 102
INTERNATIONAL PAINT CO., INC. 103

J

JONES, FRANK BOWNE 14

In order to meet the steadily increasing demand for

YACHTING

27,000 copies of the June issue were printed.

A straight course to the man who wants the best—and can pay for it

K

KAHLENBERG LABORATORIES, INC. 131
KELLOGG'S CORN FLAKES 115
KELVIN & WILFRID O. WHITE CO. 120
KERMATH MFG. CO. 93
KIDDE & CO., INC., WALTER 127
KUHLS, H. B. FRED 126

L

LEHMAN MARINE ENGINEERING CO. 118
LEITZ, INC., E. 120
LLOYD'S REGISTER OF AMERICAN YACHTS 25

M

MAINE DEV. COMMISSION 121
MASTERSON & SCHLEGEL, INC. 18
MATHIS YACHT BUILDING CO. 117
MATTHEWS CO., THE 11
MEGARGEL & GRUBER, INC. 15
MOORE & CO., B. F. 116
MORAN TOWING & TRANSP. CO., INC. 108
MT. VERNON WHISKEY ..... 2nd Cover
MUNRO, GORDON 121
MURPHY CO., THE WARNER 23–126
MURRAY & TREGURTHA, INC. 126

N

NAT. DISTILLERS PROD. CORP. ..... 2nd Cover, 84
NELSON, INC., CHRIS B. 19–97
NOXZEMA CHEMICAL CO. 122

O

OLD OVERHOLT RYE 84
OLD TOWN CANOE CO. 126
OUTBOARD MOTORS CORP. 89

P

PALMER BROS. ENGINES, INC. 113
PEIRCE & KILBURN, INC. 112
PENOLA, INC. 83
PLYMOUTH CORDAGE CO. 8
POULIOT, INC., R. J. 122

R

RATSEY & LAPTHORN 123
RED HAND COMPOSITIONS CO., INC. 127
REID, FREDERICK L. 22
REIMERS, KNUD H. 129
REMINGTON ARMS CO., INC. 99
REYNOLDS TOBACCO CO., R. J. ..... 4th Cover
RHODES, PHILIP L. 14
RICHARDSON BOAT CO. 104
RIGG & CO., LINTON 23
RITCHIE & SONS, E. S. 97

S

SANFORD, HARRY 20
SARGENT, PORTER 25
SCHOOLS 25
SCRIPPS MOTOR CO. 7
SKANEATELES BOAT & CANOE CO., INC. 101
SMITH & CO., EDWARD 108
SPARKMAN & STEPHENS, INC. 13
STAMFORD FOUNDRY CO. 114
STANLEY CHEMICAL CO. 100
STEARNS-MCKAY MFG. CO. 119
STERLING ENGINE CO. ..... 3rd Cover

T

TAMS, INC. 15
TARR & WONSON, LTD. 120
TEXAS CO. 2–3–107

U

U. S. AUTO & MARINE DISCOUNT, INC. 24
UNITED STATES MOTORS CORP. 129

V

VALENTINE & CO. 5
VINYARD SHIPBLDG. CO. 99

W

WARNER, W. L. 16
WELLS, INC., JOHN H. 21
WHITE ROCK 33
WILCOX, CRITTENDEN & CO., INC. 99
WILLIS CO., E. J. 129
WILSON, INC., PRESCOTT 103
WINSLOW, RALPH E. 22
WINTON ENGINE CORP. 31
WOOD, INC., GAR 124

Y

YACHT SALES & SERVICE, INC. 21

Z

ZEISS, INC., CARL 116